VOL. XVI. JANUARY, 1894. No. 1.

THE Southern Practitioner,

AN INDEPENDENT MONTHLY JOURNAL,
DEVOTED TO MEDICINE AND SURGERY.
NASHVILLE, TENN.

YEARLY SUBSCRIPTION $1 A YEAR, IN ADVANCE.

DEERING J. ROBERTS, M.D.,
EDITOR AND PROPRIETOR, - - - NASHVILLE, TENNESSEE.
Entered at the Post-office at Nashville, Tenn., as second class matter.

JNO. RUNDLE, PRINTER, 185 AND 187 N. MARKET STREET, NASHVILLE, TENN.

Syr. Hypophos. Co. Fellows

Contains the Essential Elements of the Animal Organization—Potash and Lime;

The Oxidising Agents—Iron and Manganese;

The Tonics—Quinine and Strychnine;

And the Vitalizing Constituent—Phosphorus; the whole combined in the form of a Syrup with a **Slightly Alkaline Reaction.**

It Differs in its Effects from all Analogous Preparations; and it possesses the important properties of being pleasant to the taste, easily borne by the stomach, and harmless under prolonged use.

It has Gained a Wide Reputation, particularly in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs. It has been employed with much success in various nervous and debilitating diseases.

Its Curative Power is largely attributable to its stimulant, tonic, and nutritive properties, by means of which the energy of the system is recruited.

Its Action is Prompt; it stimulates the appetite and the digestion, it promotes assimilation, and enters directly into the circulation with the food products.

The prescribed dose produces a feeling of buoyancy, and removes depression and melancholy; *hence the preparation is of great value in the treatment of mental and nervous affections.* From the fact also, that it exerts a double tonic influence, and induces a healtey flow of the secretions, its use is indicated in a wide range of diseases,

---

NOTICE—CAUTION.

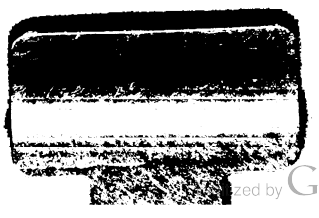
The success of Fellows' Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these, **finds that no two of them are identical,** and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, **in the property of retaining the strychnine in solution,** and the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed instead of the genuine preparation, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. **Fellows.**"

As a further precaution, it is advisable that the Syrup should be ordered in the original bottles; the distinguishing marks which the bottles (and the wrappers surrounding them) bear, can then be examined, and the genuineness—or otherwise—of the contents thereby proved.

Medical Letters may be addressed to:

Mr. FELLOWS, 48 Vesey St., New York.



CONTENTS FOR JANUARY, 1894.

Saved at Eleventh Hour.

WHEATLAND, TEXAS, Sept. 29, 1891

PARIS MEDICINE CO., St. Louis, Mo.:

Gents: In the ten years that I have been actively engaged in the practice of medicine, I have never, until now, written a testimonial to the value of any medicine; but such is the debt of gratitude I owe to FEBRILINE and the genius that formulated its composition that I deem it a plain duty to say that the life of our only child—a little girl two and one-half years of age—was doubtless saved by using, at the eleventh hour, LYON'S TASTELESS QUININE in breaking up an attack of Malarial fever of so obstinate a type that it set at defiance every other preparation of Cinchona and its Alakaloids, available to such cases.

Every dose of Cinchona Alkaloid, given or injected in any and every combination was immediately ejected and the fever had obtained such a hold that a fatal condition seemed imminent. At last I thought of FEBRILINE, a dose of which I had never prescribed. Not one dose was ejected by the stomach, and after the third dose of 5 gr. preparation a profuse diaphoresis occurred coincident with a rapid decline of temperature to subnormal, the comatose condition vanished and convalescence was rapid. I have since used it in my practice constantly, and with unvarying good result. As a febrifuge per se, as well as an anti-periodic, I consider it, for children, par excellence.

Yours truly,

G. V. HALE, M.D., (Jeff.) L.L.B.

Does not affect the head like the Quinine Sulphate. Specially adapted for ladies who dislike to take capsules. Samples sent by mail.

Wayne's Diuretic Elixir,

COMPOSED OF THE PRINCIPAL DIURETICS OF THE U. S. P., BUCHU, JUNIPER, ACETATE OF POTASH, ETC.

Essential in the successful treatment of Prostatic Troubles, Irritable Bladder and Urethral Inflammations, Acute and Chronic Catarrh of the Bladder, Retention and Incontinence of Urine, Acute and Chronic Bright's Disease, Lumbago, and the various forms of Acute and Chrpnic Rheumatism.

It Differs in its Effects from all Analagous Preparations.

It is prompt in its action and acceptable to the most delicate stomach. Recommended and prescribed by eminent physicians everywhere.

W. F. Glenn, M. D., Professor of Genito-Urinary Diseases in the Medical Department of the University of Tennessee, writes:—

"I employ Wayne's Diuretic Elixir in all irritations of the kidneys, bladder, urethra and prostate gland, and have found that it meets every indication. From the very highly satisfactory results obtained by me from the use of this preparation during the last few years, I am quite sure its use will be attended by no disappointment or regrets."

Dr. J. F. Taylor, Richmond, Ind., writes:—

"Wayne's Diuretic Elixir has given me better service for the diseases in which it is indicated, than all other remedies combined."

W. E. Kiely, M. D., Prof. Principles and Practice Medicine, Women's Medical College, Cincinnati, O., writes:—

"I have been familiar with Wayne's Elixir for many years, and I take pleasure in recommending it to the profession, feeling confident that in any case in which a diuretic is indicated, that it will give satisfaction."

Pamphlet containing Physicians' evidence of its value sent on application.

Prepared only by WAYNE ELIXIR CO., Cincinnati, Ohio, U. S. A.

Tonic Aphrodisiac Tablets (Wayne)

CONTAINING

PHOSPHORUS, DAMIANA,
EXT. NUX VOMICA, SAW PALMETTO,
EXT. COCA.

The above formula will at once commend this Tablet to the scientific and practical Physician, for it has a wide range of Therapeutic Utility.

Indicated in Physical Decadence or Exhaustion, a lowered condition of the Nervous System, the result of Over-Work, Sexual Impotency. In Gynecological Practice largely used. Removes Ovarian Pains, Depression and Melancholy. A reliable and positive Aphrodisiac.

These Tablets are manufactured for Physicians' Prescriptions only. Full literature upon application. Obtain in original package, lentiform shape, purple tablets.

Price, $1.00 per hundred, by mail, upon receipt of price.

Prepared only by WAYNE ELIXIR CO., Cincinnati, Ohio, U. S. A.

Uterine Diseases.

• • •

I am much pleased with ALETRIS CORDIAL as a remedy in uterine diseases. I have been in constant practice for more than half a century, and have used the aletris farinosa most of the time. When I learned the composition of the ALETRIS CORDIAL (Rio Chem. Co.) I inferred at once that it would prove a very good uterine tonic, and find it is just the thing. Following is a case in which I used ALETRIS CORDIAL: Mrs. C., aged 33 years, has been suffering since confinement, some two years since, with leucorrhea, more or less most of the time and frequently quite profuse. I have treated her with ordinary remedies, such as tonics internally and astringent injections, with variable results, but never entirely relieving the leucorrhea. Her general health suffered less than common in such persistent cases. Some time since I made a more critical examination, and found preternatural redness of the whole vaginal cavity from labia to uterus; the cervix uteri and the os tumified and sensitive to touch, as also the abdomen, especially over the ovaries; cold feet, hot head, debility and nervous exhaustion, odorous urine, itching of the vulva, etc. I used PINUS CANADENSIS as an injection and put the patient on ALETRIS CORDIAL. By the time the first bottle was used, the disease was about cured. The leucorrheal discharge ceased and the redness, etc., much diminished. I attribute her speedy relief to the ALETRIS CORDIAL, for all other applications had been persistently tested with but little benefit. I expected the ALETRIS CORDIAL to tone up the weakened womb, but supposed something more specific would be requisite to subdue the irritation and subacute inflammation of the vagina.

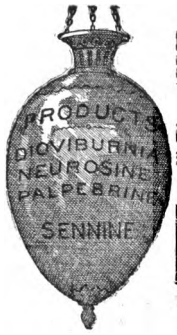
JOS. S. BURR, M. D., Leesville, O.

I had under my treatment a lady, Mrs. H., 36 years of age, married twelve years, no children, who had suffered for twenty years with painful and irregular menstruation, followed by leucorrhea and nervous hysteria at times. She had tried all kinds of drugs, but not receiving any benefit from them, consulted a number of physicians, but also without effect. The 14th of April last she became one of my patients, and I prescribed the usual formulas which were carefully prepared at my own dispensary, but to her and my regret only gained momentary benefit. I concluded to make trial of the following prescription:

R. Celerina.....8 ounces.
ALETRIS CORDIAL.....8 ounces.
M. Sig.: Two teaspoonfuls half an hour before meals.

For injection I prescribed one part WHITE EXTRACT PINUS CANADENSIS with nine parts of water, three times a day. The result has been surprising. I wanted the lady to continue the medicines, but Mrs. H. insisted upon not doing it, for she claimed that having regained her youthful health and vigor, she would need no more medicine at present.

C. A. BRUEGMANN, M. D., Marysville, Neb.



SENNINE

THE NEW AMERICAN ANTISEPTIC

FOR INTERNAL AND EXTERNAL USE IN MEDICINE AND SURGERY.

COMPOSITION—A CHEMICALLY PURE PRODUCT OF BORACIC ACID AND PHENOL.

PHYSICAL PROPERTIES—A VERY FINE WHITE POWDER, ODORLESS, SLIGHTLY ASTRINGENT, AND OF SWEETISH TASTE.

MEDICAL PROPERTIES—ANTISEPTIC, ANTIZIMOTIC, BACTERICIDAL, DEODORANT, DISINFECTANT.

Comparatively Inexpensive—Five parts of SENNINE dissolved in 100 parts of water, [2 ℥ make 4 pints] is sufficiently strong for an antiseptic wash.

Free from Toxic and Irritating Effects, A substitute for Carbolic Acid, Bichloride of Mercury, Iodoform, etc.

Put up in 2 oz. Tin Boxes with inner Perforated coverr for convenience of applying. Price ONE DOLLAR. Samples and Literature mailed FREE to Physicians on Application.

DIOS CHEMICAL COMPANY, ST. LOUIS, MO., U. S. A.

The American Antipyretic, Analgesic and Anodyne.

Antikamnia

OPPOSED TO PAIN

Gives Desired Results in the Crises of Locomotor Ataxia, Neuralgia, Sciatica, Rheumatism, Pneumonia, Menstrual Neuroses, Typhoid and

NO DRUG HABIT INDUCED—NO TOXIC EFFECT

SEND TO THE ANTIKAMNIA CHEMICAL COMPANY, ST. LOUIS, MO., FOR SAMPLE MAILED IN "VEST POCKET BOX," FREE. SPECIFY ANTIKAMNIA (GENUINE) ON YOUR PRESCRIPTIONS.

"The doctor has the highest and best right to insist that no worthless substitute be imposed upon his defenseless patient. He knows the specific effect of the genuine drug and knows equally well it cannot be successfully imitated."—Courier of Medicine.

A SUCCEDANEUM FOR MORPHIA.

Ch. Marchand's  Trade Mark.

CH. MARCHAND'S
PEROXIDE OF HYDROGEN

(MEDICINAL) H_2O_2 (ABSOLUTELY HARMLESS.)

MOST POWERFUL BACTERICIDE AND PUS DESTROYER.
ENDORSED BY THE MEDICAL PROFESSION.
UNIFORM IN STRENGTH, PURITY AND STABILITY.
RETAINS GERMICIDAL POWER ANY LENGTH OF TIME.

USED BY THE HOSPITALS OF THE U. S. ARMY.

Send for free book of 88 pages giving articles by the following contributors:

DR. E. R. SQUIBB, of Brooklyn, N. Y., DR. ROBT. T. MORRIS, of N. Y., DR. EGBERT H. GRANDIN, of N. Y., DR. JOHN AULDE, of Phila., Pa., DR. W. F. WAUGH, of Phila., Pa., DR. GEO. B. HOPE, of N. Y., DR. E. CHAREST, of St. Cloud, Minn., DR. G. F. ADAMS, of Pulaski, N. Y., DR. H. F. WIGGIN, of N. Y., DR. J. A. LARRABEE, of Louisville, Ky., DR. R. M. CHASE, of Bethel, Vt., DR. ROBT. T. WILSON, of Baltimore, Md., DR. J. H. SHERMAN, of Boston, Mass., DR. C. M. WOODWARD, of Tecumseh, Mich., DR. GEO. H. PIERCE, of Brooklyn, N. Y., and many others.

NOTE.—Avoid substitutes—in shape of the commercial article bottled—unfit, unsafe and worthless to use as a medicine.

Ch. Marchand's Peroxide of Hydrogen (Medicinal) is sold only in 4-oz., 8-oz., and 16-oz. bottles, bearing a blue label, white letters, red and gold border, with his signature. Never sold in bulk.

GLYCOZONE.

PREVENTS FERMENTATION OF FOOD IN THE STOMACH.
MOST POWERFUL REMEDY FOR HEALING PURPOSES. CURES:
DYSPEPSIA, GASTRITIS, ULCER OF THE STOMACH, HEART-BURN.

Glycozone is sold only in 4-oz., 8-oz., and 16-oz. bottles. Never sold in bulk.

PHYSICIANS WILLING TO PAY EXPRESS CHARGES WILL RECEIVE FREE SAMPLES ON APPLICATION.

BOTH OF THE ABOVE REMEDIES ARE PREPARED ONLY BY

Charles Marchand

☞ Mention this publication.

Chemist and Graduate of the "Ecole Centrale des Arts et Manufactures de Paris (France).

SOLD BY LEADING DRUGGISTS. Laboratory, 28 Prince St., New York.

THE SOUTHERN PRACTITIONER.

AN INDEPENDENT MONTHLY JOURNAL,

DEVOTED TO MEDICINE AND SURGERY.

SUBSCRIPTION PRICE, ONE DOLLAR PER YEAR.

DEERING J. ROBERTS, M.D., - - *Editor and Proprietor.*

Vol. XVI. NASHVILLE, JANUARY, 1894. No. 1.

Original Communications.

ANTHRAX.*

BY ROSS DUNN, M.D.,

Lecturer on Special Therapeutics, and Demonstrator of Anatomy in the Medical Department of the University of Tennessee.

It is only recently, and by bacteriologists, that the correct lines between anthrax and carbuncle have been drawn. In nearly all works of authority we find the two terms used synonymously, and contagious carbuncle or malignant pustule as designating that pathological condition now known from experimental research to be dependent upon a specific micro-organism, called bacillus anthracis, and which alone should be called anthrax. The lines between the two diseases are by nature so plainly and distinctly marked that we, as physicians, cannot fail to recognize them.

*A paper read at the Nashville Academy of Medicine, Nov. 30, 1893.

One is contagious and depends upon a specific germ that includes certain specific characteristic changes in the tissues affected, is constitutional, and, as a rule, fatal. The other is never contagious, but depends simply for its existence upon the ordinary pus microbe, which lights up in a diseased or impaired tissue a morbid train of action in full correspondence with all suppurative processes, is not constitutional, and, *per se*, not fatal.

While anthrax is a constitutional disease, yet, when the infection occurs on some part of the body surface, the rapid exudation into the para-vascular and cellular spaces may be so great as to completely circumscribe the bacilli, and thus prevent their entrance into the general circulation. While in this way anthrax, primarily local, may remain so, yet the rule is, unless quickly walled in by inflammatory induration, for general infection to take place. Carbuncle, originally local, always remains so.

Again, anthrax is not suppurative in its process. Sloughs may form from strangulation of the diseased parts, yet not till secondary infection, with pus microbes, will suppuration ever occur. Carbuncle from the first is suppurative. Anthrax exists epidemically. Carbuncle does not.

As a plague among the lower animals in certain countries, as Europe and Asia, anthrax is said to work the greatest ravages of any disease known. It is a disease of the lower animals, and though widespread geographically, it is rarely known here. It is one of the diseases destructive to life, to which we on this continent can, to a great extent, claim exemption.

Infection.—In those countries where the disease prevails epidemically, it is communicated from animals by direct inoculation, as by the bites and stings of insects, by feeding on the carcasses of animals that have died of the disease, or feeding in pastures where the germs have been preserved. This last, perhaps, is the usual mode of infection.

Like in other diseases of this nature, we find different animals possessing different degrees of susceptibility toward the poison. Herbivora most, omnivora next, and carnivora least. In man the disease is never epidemic, but occurs as the result of accidental inoculation. It is found to occur most usually in those per-

sons whose occupation brings them in contact with anthrax animals and their products, such as stablemen, butchers, tanners, and those employed in working in wool and hair. From its frequency in wool sorters it has been called "wool-sorters' disease."

The infecting agent finds entrance either through skin or mucous membrane. A normal, unbroken skin furnishes ample immunity against the disease; not so with a mucous membrane. The poison will as rapidly, if not more so, pass into the circulation through a perfectly healthy, normal mucous membrane as through one diseased. When once in contact with a mucous membrane, absorption of the germ rapidly takes place, oftentimes developing constitutional symptoms before any local trouble is manifest. The infecting germ may be the bacilli themselves or their spores. The spores are developed only in dead animal tissue, are very tenacious of life, resisting stubbornly destroying agents and influences. They may remain, infecting pastures indefinitely, to suddenly burst forth in an epidemic when the proper opportunity presents itself. When these spores reach the tissues of an organism they immediately develop into full grown bacilli and produce the characteristic disturbance.

Depending upon the source of entrance, whether through skin or mucous membrane, we have the disease divided into two forms, the external and internal. Of these the internal, owing to a more rapid absorption by the blood of the poison, to the fact that this absorption occurs at any and all points, that circumscribing inflammation cannot occur, is by far the most dangerous. When either the ingestion or inhalation of the poison takes place no hope of localization can be entertained. Depending upon the particular character of the tissue infected in the external form, we have it divided into anthrax pustule and anthrax œdema. The pustule depends for its existence upon a firm, unyielding structure, while the œdematous variety occurs in tissues abundant in areolar material.

Malignant, or anthrax pustule, first manifests itself by an itching sensation at the site of inoculation. Soon a small papule appears, which in turn becomes vesicular. All this time inflammatory induration is going on. This induration sometimes becomes so great as to not only effectually circumscribe the diseased mass with its germs; but from the strangulation pro-

duced, a slough may form, carrying with it the whole of the affecting bacilli. We then have a riddance of the poison, and the recovery of the patient. This is the form of anthrax that might be mistaken for carbuncle; but a careful study of the two will, in most cases, correctly determine the diagnosis.

Besides history as to epidemic and exposure, we would observe that carbuncle starts from several points of suppurating foci, is attended by a deeper seated induration, and is followed by several points of necrosis. Anthrax pustule, on the other hand, starts from one point, develops a papule with its characteristic vesicle and shows necrosis of the skin early; in from 24 to 36 hours the original vesicle, which has now become necrosed, becomes surrounded by other secondary vesicles. These appearances of the different conditions will, in most cases, determine our conclusion.

The œdematous variety presents similar appearances to the pustule form, save the absence of the characteristic papule with its attending vesicle. It, too, is attended with a more diffused swelling than the preceding, and the constitutional symptoms are more certain and are earlier.

Internal anthrax is the most fatal of all. When the poison enters the alimentary canal as in intestinal mycosis, it first manifests itself by a disturbed stomach and bowel action, vomiting, pain and diarrhœa.

When the poison enters through air passages pulmonary trouble is first to be seen. No matter what the mode of infection so soon as the bacilli are in the blood, constitutional symptoms appear; but they are not such as are truly diagnostic of the trouble. Fever, rapid and feeble pulse, cough, diarrhœa and delirium are the most usual manifestations. After studying the appearance of the disease if it has occurred locally, and noting the constitutional symptoms as they arise, if we are then not satisfied as to diagnosis, we must resort either to the microscope, or to secondary inoculation, or both. The only real and scientific and positive means of diagnosis is the microscope. The bacillus of anthrax is one of the easiest recognized of all bacilli; it was the first that demonstrated the great use of the microscope in the field of diagnosis, and incited to a renewed vigor the study of bacteriology.

This bacillus was the great stepping stone to the development

of bacteriological science. Besides the use of the microscope, secondary inoculation of a lower animal may be resorted to. If a small quantity of suspected anthracic blood be injected into some susceptible animal, symptoms of poisoning will soon occur; the animal dying in from 48 to 52 hours.

Pathology.—If the tissues at the site of primary infection be examined microscopically a non-suppurative inflammation will be observed. The bacilli seem to have a special fondness for the walls of the smallest blood-vessels, causing them to pour out abundantly certain of their contents. The bacilli enter the blood current and accumulate at those points where blood current is slowest, as at the points of bifurcation of vessels, or the origin of branches. They seek the capillaries, oftener accumulating in such numbers as to completely dam the current. Though a blood germ, they are not everywhere equally distributed, more being found in the blood of the spleen, liver, stomach, intestines and lungs than in any other portions. Fewest are found in skin, muscles and nerve tissues.

Frequently, where they exist in greatest numbers, they cause ulceration of the vessel wall, with escape of the contents producing a hemorrhagic infiltration. In the blood, in their rapid development, they consume the oxygen and leave a condition of carbonic acid gas poisoning. In the internal organs they obstruct the blood passages and produce great engorgement. In the mucous membrane of both lungs and intestines they cause serious alterations in the way of inflammation and oftentimes ulceration.

Cause of Death.—This is thought to be due to a setting free in the system of certain toxic substances from complex combinations which answers perfectly to a definition of a ptomaine.

This theory of the cause of death has been verified by taking the ptomaine resulting from the cultivation of the baccillus in some suitable artificial culture medium and injecting it into a susceptible lower animal. From this experiment death has been found to occur exactly as it does in an anthrax patient.

Prognosis.—Except in anthrax pustule prognosis is unfavorable indeed. In fact it is questionable whether any case of constitutional poisoning has ever recovered.

In anthrax œdema as well as in the internal form of the

disease no hope of recovery need be entertained, no matter how heroic the treatment. Of all the forms, anthrax pustule is the most amenable to treatment. The indications to be met in it are the localization and neutralization of the poison. The most usual methods adapted are parenchymatous injections.

The agent used in this injection is carbolic acid in a solution varying from a five to ten per cent. solution.

The injection must be thrown down into the healthy tissues beneath, and around the poisoned mass. Injections of the solution should also be made in the diseased mass itself, as by this method inhibition of germ development will be produced. The site of injection should be constantly covered with some good antiseptic to prevent secondary infection. Besides parenchymatous injection complete excision has been recommended.

The objection to it has been urged that the resulting open-mouth vessels are more susceptible to secondary inoculation than before the excision was done. This objection, however, could be met by the suggestion of an antiseptic compress after the excision.

In fact, if the enucleation could be accomplished without danger of forcing into the healthy part of the wound the poison already in the diseased portion, then excision would be by far the preferable of the two. Surely secondary infection could be prevented by proper antisepsis.

So far as the treatment of internal anthrax and the œdematous variety of the external form, is concerned, but little can be said.

No probability exists as to preventing general infection in either of these forms. Violent and quick acting purgatives have been recommended in intestinal mycosis but certainly with no hope of cure.

Death is certain, and no treatment however heroic will avail anything. We may by reconstructives and stimulants prolong life a short while; but at best only for a time.

To correcting complications and smoothing the pathway of our patient into the Great Beyond our mission is limited.

THE RECOGNITION AND MANAGEMENT OF WOUNDS OF THE URINARY BLADDER.*

BY RICHARD DOUGLAS, M.D.,
Professor Gynecology Medical Department University of Nashville and Vanderbilt University.

From this caption one might infer that you were to be inflicted with a lengthy contribution upon this rather broad subject. Such a fate, be assured, does not await you. I merely wish to open the gateway to a general discussion of this highly interesting topic, and incidentally report two cases of vesical injury that have recently fallen to my care.

The natural classification of wounds of the urinary bladder is, from their anatomical nature, into extra and intra-peritoneal. As it is the purpose of this paper to deal more especially with wounds involving that part of the viscus invested by peritoneum, it will be sufficient for this occasion to recite the facts in a recent case of extra-peritoneal laceration of the bladder as illustrating fairly the symptoms and general management of this variety of vesical injury.

Malcolm McQueen, aet. 13, a robust, healthy, country lad was seated in an open vehicle; a horse attached to a buggy ran into him from the rear. In the collision he was thrown forward, the shaft of the buggy striking just to the right of the coccyx, he was otherwise bruised and for a short time rendered insensible. When consciousness was restored he screamed with pain in the hypogastrium and complained of an urgent desire to urinate, with violent effort. He was placed in a wagon and carried to his home, eight miles distant, where I saw him in consultation with Dr. Hutton, twelve hours after the accident.

His clothing and bed were found to be wet from the constant escape of urine through the wound. The patient was now anæsthetised, and a careful examination made. An irregular circular

*A paper read by title before the Southern Surgical and Gynecological Association, Nov. 11, 1893.

wound was found just to the right of the coccyx and near the margin of the anus. The shaft had entered at this point, lacerating the sphincter fibres, pushed aside the rectum and penetrated the base of the bladder. With a Sim's rectal speculum, the wound was held open, and with the aid of reflected light I could look directly into the bladder. It being collapsed, I enjoyed only a limited field of observation. Digital examination was much more satisfactory; thus easily exploring the cavity of the bladder; and I ascertained definitely that there was no other injury to its walls; furthermore, and most important was the fact, that the wound was entirely extra-peritoneal. The surgical indications were quite clear—to prevent urinary infiltration by free drainage. This was was done by stuffing lightly the neck of the wound down to the bladder-wall with gauze. This wick conducted the urine freely away. On the third day there was general abdominal tenderness and tympany with temperature of 102. Salines were freely given; after their action these symptoms subsided. For the first week after the injury the boy complained of great and frequent desire to micturate—a few drops of bloody urine would pass. The catheter was occasionally used with negative results. On the 13th day he passed about two ounces per urethram. After this there was a daily increase in the amount passed naturally. The wound contracted and granulated rapidly. On the 20th day the dressings were dry, and after this the urine was voided naturally. In five weeks from the date of injury the boy was discharged well.

This is a representative case of extra-peritoneal, penetrating wound of the bladder. We occasionally meet with concealed extra-peritoneal rupture consequent upon some external violence, fracture of the pelvis, or the more frequent cause of violent muscular contraction, compressing an over-distended bladder in the effort to overcome the obstruction offered by a urethral stricture. Here there is no escaping urine to proclaim the indisputable character of the injury. The symptoms are misleading, and the physical signs often negative. The attendant dangers, hemorrhage, urinary absorption and sepsis are threatening. A conclusion must be reached and prompt action taken. A notable fact, emphasized by Briddon and remarked by many, is that this particular form of vesical injury is frequently met with in men

under the influence of alcohol, or just recovering from a debauch. However induced, the chief symptoms are hypogastric pain, vesical tenesmus and the passage of a few drops of bloody urine; and, if a sharply curved silver instrument be used, it may be passed through the rent in the anterior wall, and from the pre-vesical space we may withdraw quite a quantity of clear urine. This will only occur when the catheter is used soon after the injury, before the urine has infiltrated through the tissues. Percussion, palpation and rectal examination assists but little in coming to a discriminating diagnosis; the escaping blood precludes the use of the endoscope. The surgeon is forced to rely upon the few points given for his diagnosis, keeping in mind the character of the violence, condition of the patient and bladder at the time of the accident, and not forgetting, in obscure injuries, the possibility of vesical rupture.

Extra-peritoneal rupture occurs usually on the anterior surface. Blum noted this fact, and one should readily suppose it to be so from anatomical reasons, as the recto-vesical fascia has not the sustaining power of the peritoneum and the loose, fatty tissue about the Cavum Retzii offers but little resistance to violence. Confronted with a diagnosis of rupture, can we affirm that it is entirely extra-peritoneal; a most important question when it comes to the management of the case. In the premises we have one of three plans open to us:

a. Perineal section and drainage. This we will dispose of, as it is the verdict of experience, that even in lithotomy the bladder is inadequately drained through the perineum.

b. Supra-pubic incision carefully avoiding the peritoneum. This step should be looked upon more as a diagnostic measure. If upon exploration the rent is found to be extra-peritoneal and the volume of urine is confined to this space, the exploration may be sufficient. We can then act upon the suggestion of Weir of thrusting a pair of forceps through the infiltrated tissues of the perineum and cut from below upwards, then with the tube in the bladder through the rent and gauze packed about, establish thorough drainage. This supra-pubic operation upon a flaccid bladder and through tissue infiltrated with urine presents difficulties, and when performed is not entirely satisfactory. The surgeon feels that his examination is not complete,

that there is a possibility of more extensive injury. He is not assured against intra-abdominal rent. This leads us to consider the third and last method of treating a vesical rent, the nature of which we do not know but suppose to be extra-peritoneal.

c. *Open the prevesical space, remove all urine and blood clot, if such be present, ascertain what injury there may be extra-peritoneal, then with your way clear and clean, open the peritoneum for further examination.*

A practical classification of intra-peritoneal injuries of the bladder may be made under two heads:

1. Intra-peritoneal rupture.
2. Intra-peritoneal wounds occurring during cœliotomy.

Prior to 1886 when McCormac achieved his gratifying success in the treatment of two cases of intra-peritoneal wounds of the bladder, surgeons manifested a decided disposition to regard the accident as uniformly fatal, consequently the symptoms and signs of this accident have not received that analytical study which leads to refinement and precision in diagnosis. It is true its treatment may now be said to have kept pace with the general advances of abdominal surgery, but we are prone to accept in this, as in all abdominal conditions, a surgical diagnosis without fully informing ourselves as to the most probable pathology. It may be assumed that intra-peritoneal rupture, except in those rare cases where it is complicated by fracture of the pelvis, is an accident which occurs only when the viscus is distended or more frequently *over-distended* with urine. The application of this fact is in itself of diagnostic significance. The special or acting cause whether it be in the form of external violence, or muscular contraction could scarcely expend its force upon a flaccid sac. Furthermore when confronted with an obscure injury to its locality, "always think of the possibility of injury to the bladder" (*Ed. Med. News*, Oct. 1888); thus forewarned, we can investigate these special symptoms which are usually considered diagnostic of this condition. By common consent it is universally held that when any of the hollow viscera are opened, either by the ravages of pathology, or by accident, general disturbance follows, and is expressed in the condition recognized as shock. Greater familiarity with intra-abdominal pathology has taught surgeons that shock is not altogether a ner-

vous mystery, and in many injuries to vital parts, it is conspicuous by its absence. A study of the recorded cases by Lloyd, McCormac, Blum, and Henry Morris' unique case, and many others, as well as upon the authority of Greigg Smith, we know that extensive rupture of the bladder may exist, and the patient bear but little constitutional evidence. It may be anticipated, however, that the majority of patients will be found in pronounced shock attributable to the great violence, severe pain or attendant hemorrhage. Hypógastric pain, intense and lancinating, accompanied by urgent desire to micturate is the most conspicuous symptom, and generally demands relief before further investigation can be made. Unfortunately, rupture of the bladder, as before stated, often occurs in men in an intoxicated state, and their general sensibility is so obtunded that these two important symptoms of shock and pain are delayed (Briddon, Smith.) Complete ischuria accompanied by a tormenting desire, with a fruitless and uncontrolable effort is the principal and most suggestive symptom directing our attention at once to the bladder. The patient will exhaust himself in the effort to urinate—a few drops of bloody urine are all that dribbles away, but here again we may be misled. It has occurred that patients pass quite a quantity of clear urine in the presence of vesical rent. This is an exception, and needs to be mentioned only to guard against the possibility of error. We now employ the catheter in response to the patient's urgent desire to empty the bladder, and as a diagnostic measure. When the ordinary soft catheter is introduced, we usually have a negative response—a few drops of bloody urine may escape. By deep insertion and continued manipulation, the instrument may be passed through the rent and from the peritoneal cavity draw off quite a quantity of clear urine. This peculiarity should be noticed, that the flow of urine is irregular, perhaps intermittent, the force of the outflow corresponding with inspiration. All surgeons speak of catheterization of the peritoneal cavity. I take it, that it is not so practical as one would suppose. If a metalic instrument is employed, the operator will find the bladder contracted, thus greatly limiting the mobility of the instrument. It is possible to pass the beak through the rent, its point may then be brought without resistance in contact with the abdominal wall, which would be ac-

cepted as conclusive evidence. We would urge the greatest gentleness in this manipulation, for fear of inflicting greater injury. Sanguinolent urine is spoken of as denoting vesical rupture. As a diagnostic sign it is of but little value, such urine in any quantity, on the contrary is rather evidence against rupture, indicating lesion of the mucous membrane alone. But little information can be gained by palpation and percussion. The abdominal muscles are generally quite rigid. Thus it is, one must admit that the series of symptoms and signs mentioned are not unequivocal. It is eminently desirable that a definite conclusion should be reached. It was while thus perplexed that it occurred to Dr. R. F. Weir to employ the diagnostic expedient which he is pleased to style as a certain and safe method of determining intra-peritoneal rupture. After distending the rectum, the bladder is filled through a catheter with a definite quantity of sterilized water, then empty the bladder with the catheter. The amount withdrawn is now measured, and if it corresponds with the amount injected, it is conclusive evidence that the walls of the organ are intact. The objection urged, and by good men, against the procedure is that if a rupture exists, the water escapes into the peritoneal cavity and further disseminates the urine. If I may be pardoned, I would say this argument was rather fanciful. If a rupture is shown to exist, immediate cœliotomy is demanded, and thorough irrigation of the entire peritoneal cavity is one of the most important steps in the technique. Since the experiments of Senn, and borrowing somewhat the idea of Weir, hydrogen gas has been injected, experimentally I believe only, the idea being to note whether the gas escapes into and distends the general peritoneal cavity, or simply developes a globular tumor at the site of the bladder. The method is of undoubted value and devoid of all harm except that of careless over-distension. It cannot be generally applied, and is therefore of little practical value. I must believe that the general symptoms and signs by which we are taught to recognize intra-peritoneal rupture, when taken collectively are strongly presumptive, but not conclusive; if analyzed each may be proven to be misleading. Our only positive evidence is inflation either with air or fluid. By this method we may obtain reliable advice.

In the light of our present knowledge, and in the enjoyment of the many successful cases that are now upon record, it is but little less than amusing to read the conclusions of that eminent surgeon, Mr. Christopher Heath, who contributed in 1880 an interesting paper upon the treatment of rupture of the bladder. He rejects the suggestion of Prof. Gross made thirty years before, of treating all intra-peritoneal wounds of the bladder by abdominal section, and reviewing all the methods then in vogue, concludes that intra-peritoneal rupture should be treated by that eminently conservative plan, and as his reviewer in the *Amer. Jour. Med. Science* says, "common sense" plan of catheterism and washing out both the bladder and the peritoneal cavity through the rent. Happily we are beyond that now. Upon the presumption that a rupture exists, the abdomen should be opened with all possible haste. The presence of shock, unless to extreme, is not a contra-indication. The rent should be sought, and when discovered closed. I may be pardoned for touching upon a few points in the technique, and let us talk with our apron on and scalpel in hand. The abdomen opened, the first step is to remove by sponging and irrigation all free urine and blood, then place your gauze pads between bowels and bladder, and throw your patient into Trendelenberg's position. This renders the bladder accessible, and dispenses with the rectal bag. The rupture found, we should proceed to close it quickly, remembering we are working upon a patient already in shock. Grant suggests that stout catgut should be passed through the peritoneal coat at the lower angle of the rent; with this the bladder is held up. I would modify this by introducing two catgut cords. One at each terminus of the rent, not for the purpose of dragging the bladder into view, that is not necessary if your patient is in the Trendelenberg position, but with the idea of making tense the margins of the wound. This is done by grasping the catgut at each angle of the rent with long forceps and intrusting them to an assistant, directing him to steady the part by gently pulling in opposite directions.

You can now, with the greatest ease, introduce your sutures with mathematical exactness. The sutures should be of sterilized silk, introduced about one-eighth of an inch apart, and should embrace the serous and muscular coats only. The

Lembert suture should go well beyond the angles of the rent (McCormac). The punctures made for the catgut-fixation cords should be enclosed in the embrace of the last suture. All sutures should be introduced before tieing any; as the terminal sutures are tied, of course, the catgut is removed. It is wise now to distend the bladder and test your work. The peritoneal cavity should again be irrigated. The question of abdominal drainage depends somewhat upon the amount of urine extravasated, and the time intervening between the injury and the operation. Drainage can scarcely do harm. The bladder should not be teased by retaining a catheter. It is quite sufficient to draw the urine every three or four hours. In 1889, Reeves Jackson reported to the American Medical Association sixty-seven cases that he had collected of intra-peritoneal injury to the bladder during laparotomy. Is it prudent to speculate what that list would now be if all the returns were in? Considering the difficulties and complications met with in cœliotomy, it does not necessarily reflect upon the surgeon to wound the bladder. This accident occurs more frequently in the performance of a hysterectomy for fibroma than in any other condition. Having justified the blunder, it only remains for me to tell you, that in a recent hysterectomy for the removal of an impacted fibroid, in making my circular cut, so as to strip down the capsule, I laid open the bladder at least two inches. The accident was recognized at once, and wound immediately closed with Lembert silk sutures. The tumor was removed, stump treated extra-peritoneally. Drainage was not employed. The patient slowly but completely recovered. The wound in the bladder did not complicate matters in the least.

A NEGLECTED DEPARTMENT OF MEDICINE.

FOOD AND ASSIMILATION.

BY C. C. FITE, M.D.,

If the wraiths of all the infants who have died from improper feeding were to float over the sun, the obstruction of light would be so great that we would not only have a total eclipse, but hours be consumed in the passage of the shadow.

If the mediums were to call together the spirits of all the consumptives who became victims from inefficient feeding, there would be such a gathering as would make the greatest armies of the world appear as a mere handful of men.

Now that the medical mind has reached the point in development to realize that specific medication is a snare, that symptomatic treatment is a delusion, that we know after all little of therapeutics, but must study the ground work of the economy, physiology and tissue metamorphosis, we can with some degree of confidence expect a progress in the future that will lead to something positive and scientific in internal medicine and an approach to the definiteness and success already reached in surgery.

The varieties of theories in regard to the feeding of infants deprived of breast milk, is something appalling to contemplate. At a recent medical debate, where men of experience and reputation were discussing this question, one stated that raw cow's milk was all-sufficient; another said that sterilized milk was the thing; another was enthusiastic over Pasteurized milk; another of food prepared by the Blank Co.; still another of the other kind, and so on to a stupifying degree of confusion and skepticism, but each condemned the theories of the others. His was the only correct and reliable plan; and each admitted that his his theory had undergone a change in recent years.

Wherein therefore lies the truth? In that the problem is as unsettled as ever, and that a certain number of children live in spite of errors; but we must also bear in mind the thousands who

go to their long home before the journey of life is fairly begun.

Surely there is a "right and best way." It is not yet discovered perhaps, and when it is found it will not be from misleading clinical and symptomatic studies, but from scientific investigations made on the human stomach by chemical analyses of the foods after they have been ingested, digested and then recovered and analyzed.

Studies of this kind will enable us to understand the physiology of digestion, which is yet to most physicians an unknown field, and to the chemist and the physiologist a stumbling block. Old time notions must be promptly abandoned if any truth is to be found. The hoary headed theory that pancreatic and salivary secretions are not established until about the sixth month, is now known to be false; in some infants the secretions are demonstrable by the sixth or eighth week if not earlier; not to a marked degree of course, but sufficient to explain how it was possible for so many infants to have lived and thrived on starchy foods in spite of the trite lecture-room dictum: "It is not possible for young infants to digest starch."

The discovery of the germ which causes tuberculosis, has for a time interfered with a due appreciation of the fact that a seed will not take root on a soil unfavorable to its development. If the individual is robust, has a normal supply of good rich blood, the germ is cast off; but if there is a condition of debility and anæmia the germ takes hold and developes, then the patient has consumption. There is no proposition so evident as this; no fact in medicine is so well fixed and established beyond controversy; and yet how many medical men ever stop to think of it. The primary point at which tuberculosis is to be fought is in the digestive tract, not in the lungs, and it is not so much in the stomach as in the duodenum—a person who has a digestive apparatus which can assimilate fats and convert starch into sugar, will be fat and well and impervious to the insidious tuberculus germ. To get to the point, flatulent dyspepsia or duodenal indigestion, is the fixed and certain origin of phthisis; even if the immediate causes, a cold and exposure to contagion, have the credit of it and of course render it a fact. Therefore, in incipient consumption, do not give the patient up, or resort to routine treatment, but bend every energy to relieving the faulty assimilation of

Galenical Preparations

MANUFACTURED BY

WILLIAM R. WARNER & CO.

——FOUNDED 1856——

Standard and Officinal Preparations for Physicians Only.

PIL. SUMBUL COMP.

(WM. R. WARNER & CO.)

(Dr. Goodell.)

℞—Ext Sumbul....1 gr. Ferri Sulph. Exs....1 gr.
Asafœtida.....2 grs. Ac. Arsenious....1-40 gr.

"I use this pill for nervous and hysterical women who need building up." This pill is used with advantage in neurasthenic conditions in conjunction with Warner & Co.'s Bromo Soda, one or two pills taken three times a day.

PIL. DIGESTIVA.

(WM. R. WARNER & CO.)

A VALUABLE AID TO DIGESTION.

℞—Pepsin Conc' . .1 gr. Gingerine .....1-16 gr.
Pulv Nux Vom.¼ gr. Sulphur.....½ gr.

This combination is very useful in relieving various forms of Dyspepsia and Indigestion, and will afford permanent benefit in cases of enfeebled digestion, where the gastric juices are not properly secreted.

As a dinner pill, Pil. Digestiva is unequalled, and may be taken in doses of a single pill either before or after eating.

PIL. LADY WEBSTER.

(WM. R. WARNER & CO.)

℞—Pulv. Aloes....2 grs. Pulv. Rose Leaves..½ gr.
Pulv. Mastich..½ gr. M Ft. one pill.

Lady Webster Dinner Pills. This is an excellent combination officially designated as Aloes and Mastich, U. S. P. We take very great pleasure in asking physicians to prescribe them more liberally, as they are very excellent as an aperient for persons of full habit or gouty tendency when given in doses of one pill after dinner.

PIL. ANTISEPTIC.

(WM. R. WARNER & CO.)

Each pill contains—
Sulphite Soda.....1 gr. Ext. Nux Vomica..¼ gr.
Salicylic Acid.....1 gr. Dose, 1 to 3 Pills.

Pil. Antiseptic is prescribed with great advantage in cases of Dyspepsia attended with acid stomach and enfeebled digestion, following excessive indulgence in eating or drinking. It is used with advantage in Rheumatism.

PIL. CHALYBEATE.

(WM. R. WARNER & CO.)

Proto. Carb. of Iron, 3 grains.
Dose, 1 to 3 Pills.

(WM. R. WARNER & CO.'S FERRUGINOUS PILLS.)

Ferri Sulph. Fe SO_4 } — Ferri Carb. Fe CO_3
Potass. Carb. K_2CO_3 } — Potass. Sulph. K_2SO_4

PIL. ANTISEPTIC COMP.

(WM. R. WARNER & CO.)

Each pill contains
Sulphite Soda.....1 gr. Powd Capsicum..1.10 gr.
Salicylic Acid.....1 gr. Concentrated Pepsin,1 gr.
Ext. Nux Vom.... ½ gr. Dose, 1 to 3 Pills.

Pil. Antiseptic Comp. is prescribed with great advantages in cases of Dyspepsia, Indigestion and Malassimilation of food.

PIL. CHALYBEATE COMP.

(WM. R. WARNER & CO.)

Same as Pil. Chalybeate, with ½ grain Ext. Nux Vomica added to each pill to increase the tonic effect.

Dose, 1 to 3 Pills.

PIL. ALOIN, BELLADONNA AND STRYCHNINE.

(WM. R. WARNER & CO.)

℞—Aloin.....1-5 gr. Ext. Belladonna....½ gr.
Strychnine...1-60 gr. Dose, 1 to 2 Pills.
Medical properties—Tonic, Laxative.

Try this pill in Habitual Constipation.

INGLUVIN

A POTENT AND RELIABLE REMEDY FOR THE CURE OF

MARASMUS, CHOLERA INFANTUM,

INDIGESTION, DYSPEPSIA and SICK STOMACH, caused from debility of that organ. It is superior to the Pepsin preparations, since it acts with more certainty, and effects cures where they fail.

A Specific for Vomiting in Pregnancy,

In doses of 10 to 20 grains.

TO THE MEDICAL PROFESSION

Elixir Salicylic Acid Comp.

Prepared only by WM. R. WARNER & CO., PHILADELPHIA, PA.

This preparation combines in a pleasant and permanent form, in each fluid drachm, the following:

℞ Acid. Salicylic (Schering's) grs. v. Potass. Iodid. grs. iss.
Cimicifuga, - . grs. i¾. Tr. Gelsemium, gtt. i.

So prepared as to afford a permanent, potent and reliable remedy in

RHEUMATISM, GOUT, LUMBAGO, ETC.

This preparation is especially valuable for rheumatic diathesis and in the treatment of acute inflammatory subacute and chronic rheumatism; any of which will yield to tablespoonful doses; every three or four hours, until four doses are taken; then a dessertspoonful at a time and finally decreased to a teaspoonful every three or four hours.

In acute inflammatory rheumatism, experience has proven that two tablespoonfuls administered every four hours, until a slight ringing in the ears follows, the dose then decreased to a tablespoonful every three or four hours, will produce the desired effects.

The advantages of Elixir Salicylic Acid Comp are afforded by the combination of Salicylic Acid with Soda in excess, thus forming a salt less corrosive and irritating and more readily borne by the stomach.

The other ingredients possesses advantages well known to the Profession to whom this preparation is alone introduced, we therefore suggest the propriety of specifying "Warner & Co.'s" and ordering in f℥xii quantities, to obtain original bottles.

It is a matter of great satisfaction to us to be able to place before the Profession a remedy so effectual in the cure of one of the most stubborn classes of disease.

Elixir Salicylic Acid Comp. is put up in 12-oz. square blue bottles, with prescription label on it, and may be obtained from Druggists everywhere.
See that no substitutes are offered.

fatty and starchy foods. Do not give tonics and alcoholics blindly, but prescribe a diet and medical formulary which will relieve the indigestion and fill the tissues of the body with a strong volume of rich blood. In giving directions in regard to exercise and rest, bathing, food, climate and medicine, bear in mind that naught will avail unless tissue metamorphosis is promoted and the wastes of the body supplemented and re-inforced. All treatment that secures any permanent good for the patient must come in this way, and any other is a snare and only postpones the evil day for a season.

One of the theories in the profession is, that pancreatic extracts are useless when taken into the stomach, because the ferments therein contained are destroyed by the acid stomach secretions. The truth is, that pancreatic extracts if taken at meal time, have from thirty to forty-five minutes to act before the acidity of the stomach's contents has reached the degree of acidity—one-tenth of one per cent—which renders them inefficient. A degree of acidity below that given doses does not interfere with their action.

One of the easiest and most available methods of promoting intestinal digestion, is by administering Maltine. This preparation contains enough diastaste to digest thirty times its weight of starch and it acts in a neutral or acid medium, and hence from the moment it is ingested to the completion of the process in the stomach, the starches are being acted on and converted into maltose and dextrine, and thereby prepared for absorption from the intestinal tract. The more complete the conversion of the starch by the salivary ferments and diastase, the less work there is to be done in the duodenum and thus intestinal indigestion is prevented.

One great difficulty in giving cod liver oil in these cases is due to the fact that it is apt to cause congestion of the liver, due to giving more of the oil than the economy can utilize; another and the most evident, is its tendency to cause indigestion and eructations. This is caused by giving it in the wrong way. It should be so prepared that the vehicle containing it should be a digestive agent and hence the advisability of giving the oil in combination with the diastasic preparation above named.

If there is one thing in medicine which is surely known to

those who have studied the question, it is that intestinal indigestion, or its sequel, duodenal catarrh, is the almost constant cause of urticaria and often eczema, and yet I personally know men eminent as dermatologists who do not recognize, or at least do not prescribe, for this condition when treating such cases.

It is unnecessary to go into further details on this subject; enough has been said to illustrate that the important study of foods, digestion and assimilation is a neglected branch of medicine. During the last few years I have had some unusual opportunities of experimenting with foods and digestive agents, and of observing results obtained from feeding persons with foods, with and without digestive ferments being added, with subsequent stomach pumpings and chemical analyses, and I am overwhelmed with astonishment at how little is really known about the questions herein discussed.

My purpose in writing this paper is to urge the practicing physician to give more attention to this absorbingly interesting subject, and to cultivate a sufficient degree of agnosticism to take the theories now prevalent tentatively, and be ready to at least investigate what is being done by the practical chemist, for it is only in this way, by practical studies, that anything can be arrived at which will be of permanent value.

102 West Ninety-Third St., New York.

Selections.

Chloroform.—The practical point in chloroform administration is now what it has always been: Is the pulse to be taken as a guide to the effect of chloroform or is it not? The answer to this question depends entirely on its effect on the heart. If it can be proved that chloroform ever has any direct action on the heart, it must be right to watch the pulse; but if it can be proved that chloroform never does affect the heart directly under any circumstances it is no less certainly wrong, in the sense of being unnessary, to do so. It was to determine this question that the

Hyderabad Commission was appointed, and in support of this statement the following passages are quoted from *The Lancet* of September 21, 1889:

"The question whether chloroform paralyses the heart or not is one of the greatest possible practical importance, for upon its correct solution the lives of thousands of people and the happiness of thousands of families may depend. Both in Europe and America clinical experience and physiological experiments have led to the conclusion that it has a paralysing action on the heart, whilst ether exerts such an action in a very minor degree, if at all. In consequence of this ether is now largely used in this country as well as in America for producing anæsthesia in surgical operations in spite of the greater pleasantness and convenience of chloroform. It is almost impossible to believe that the conclusion at which European and American surgeons and scientists have arrived is, after all, destitute of foundation and little better than an idle dream. It may not be possible to work out completely all the questions which may arise, but if the Hyderabad Commission, with the aid of Dr. Lauder Brunton, can settle definitely the question whether chloroform does or does not affect the heart directly, a most important practical object will have been attained by means of the Nizam's generous offer."

Up to the year 1879 there were two rival schools with regard to chloroform. The Edinburgh school, represented by Simpson and Syme, held that chloroform has no direct action on the heart: "We are guided as to the effect not by the circulation, but entirely by the respiration." The London school, represented Erichsen, believed that chloroform affects the heart directly: "When anæsthetised the patient requires the most careful watching by the chloroformist; his finger should never be off the pulse nor his eyes taken away from the countenance of the patient." Each of these schools had its enthusiastic adherents. Before 1870, when Simpson and Syme died, their success and prestige gave the Edinburgh school an advantage. After 1870, when the personal influence of Syme and Simpson had disappeared and Lister had left Edinburgh, the mere fact that deaths occurred from time to time under chloroform in an unexpected and apparently sudden manner and were attributed to heart failure caused the tide to flow the other way; and in 1879 over-

whelming preponderance was given to the views of the London school by the report of the Glasgow Committee of the British Medical Association. The Glasgow Committee made a limited number of experiments on dogs and rabbits and published tracings of a manometer experiment on a dog which showed that chloroform lowers the blood pressure and that sometimes under chloroform the fall of blood pressure is sudden and, as they said, capricious. The Glasgow Committee stated that the fall of the blood pressure alone shows that the inhalation of chloroform is always dangerous and that the sudden falls show that chloroform may cause death by sudden stoppage of the heart; and herein lies its chief danger. No one thought of inquiring whether a fall of blood pressure is in itself dangerous or not, in spite of the extraordinary fact that the animal from which the Glasgow trace was taken did not die. Its breathing was unaffected and the only sign on which the theory of danger was based was the fall of blood pressure shown in the manometer tracing. This fall of blood pressure was assumed, without the shadow of a proof, to mean weakening of the heart, and on this ground the Glasgow Committee recommended in their report that "it is incumbent on every one giving chloroform to watch the pulse." The tracing of the Glasgow Committee was accepted almost universally. I had given chloroform for fifteen years and had never watched the pulse and never had a death, but the tracing and report of the Glasgow Committee appeared to me to be almost hopelessly damaging to the Edinburgh School. Chloroform had to be employed, however, in surgical cases in India, and I continued to administer it without a fatality in the way I had been taught by Syme. At the end of 1888, nearly ten years later, the Nizam's Government appointed the first Hyderabed Commission to carry out experiments with chloroform on dogs. Of this Commission my old friend Dr. Hehir was president. In commenting upon the experiments of the first Hyderabad Commission *The Lancet* of March 2, 1889, said: "Mr. Lowrie, as a disciple of Simpson and Syme, arrives at conclusions consonant with the teachings of those great clinicians but utterly at variance with the experience alike of experiment and practice as carried out in Europe. Whilst welcoming the attention paid to the subject by Hyderabad Commission we cannot but feel that,

should the Commission inculcate a disregard of the heart as a factor in chloroform dangers, it will do harm and provoke a slip-shod carelessness in the use of that valuable anæsthetic which must in the long run do damage to the cause the Commission has espoused."

"In reply to this I wrote to *The Lancet* of May 11, 1889, and urged the appointment of a joint European and American Commission to confirm or disprove the conclusions of the first Hyderabad Commission. This suggestion was disregarded, and on September 21, 1889, the Nizam's Government, with unprecedented liberality and public spirit, appointed a second Commission, with Dr. Lauder Brunton and Dr. Bomforn as members. Speaking in anticipation of this Commission *The Lancet* said: "It may perhaps be considered as a further advantage that in this work Dr. Lauder Brunton has very decidedly stated that one of the dangers resulting from chloroform is death by stoppage of the heart. 'Audi alteram partem' is the motto of an important secton of *The Lancet*, and we think that by getting both opinions regarding the effect of chloroform on the heart represented on the Commission, as they will be by Dr. Lauder Brunton and Surgeon-Major Lawrie, we are more likely to obtain a correct conclusion." Dr. Brunton arrived in India firmly convinced of the reality of sudden death by stoppage of the heart under chloroform. He considered that there was no danger with chloroform in capital operations like amputations of the leg or arm, but that the special danger with chloroform lay in minor operations like dividing the external rectus for starbismus or cutting out the toe-nail. I well recollect Dr. Bomford saying, when he propounded these views, that if they were correct all that was necessary to make the safe operation of cutting out the toe-nail under chloroform would be for the patient first to have his leg cut off.

We are now in a position to understand clearly the lines on which the research of the second Chloroform Commission was carried out. The earlier experiments of the Commission were devoted to persistent attempts by Dr. Lauder Brunton to stop the heart, and after every stage of the work was completed he returned to this point. Every conceivable operation that his ingenuity could suggest was performed without the slightest re-

sult as far as the heart pressure or blood pressure was concerned. When it was found impossible to stop the heart directly by chloroform or by chloroform combined with any form of surgical shock Dr. Bomford suggested that we should stop it by electrical irritation of the vagus nerve. First we discovered that this stoppage of the heart did the animal no harm, and afterwards that slowing of the heart under chloroform delayed the conveyance of chloroformed blood to the nerve centres and prevented poisoning, The delay or prevention of poisoning was evidently effected in two ways. In the first place, it is clear that if air in the lungs is full of chloroform and the pulse is 60 a minute 60 atoms of chloroform will be taken up by the blood as it passes through the lungs every minute; but if the pulse is slowed down by the action of the vagus from 60 to 20 not only will the intake of the chloroform into the blood from the lungs be diminished from 60 to 20 atoms a minute, but it will be conveyed to the brain at a third of the rate. We found, then, that sudden lowering of the blood pressure and stoppage of the heart by irritation of the vagus nerve was not a danger but a safeguard. But we found further that stimulation of the vagus actually produces the Glasgow trace, and we also discovered that the Glasgow trace can be produced naturally in various ways. For example, it may be obtained by cramming a cap with concentrated chloroform over the animal's mouth and nose and by making it hold its breath or by asphyxiating it; or by over-dosing it with chloroform so that the respiration is stopped. In all these conditions the Glasgow trace can be readily be reproduced, and it can never be obtained when the vagus nerves are divided except by electrical irritation of their cut ends. Obviously therefore the Glasgow trace was due to irritation of the vagus. Dr. Bomford's discovery not only pricked the Glasgow bubble, but as you will see shortly, proved to be the keystone of the Commission's work. As soon as it was demonstrated that the action of the vagus nerve is a safeguard in threatened or actual poisoning by chloroform it became clear that chloroform and shock are not associates but incompatibles, and that the supposed capricious action of chloroform upon the heart is due not to the direct effect of the absorbed poison upon the heart or its nerves, but to the indirect effect of concentrated vapor or to the direct effect of poisoned blood upon

the nerve centres, resulting in either case in the exclusion of the poison from the system. The supposed danger indicated by the Glasgow trace is therefore a myth and the London method of chloroform administeration, of which the essential principles since 1879 has been to watch the pulse for sudden heart failure and under which so many deaths have occurred, is founded on error; that error being a misinterpretation by the Glasgow Committee of their own tracing.

The third portion of the Commission's work consisted in the demonstration of the fact that lowering of the blood pressure is a normal condition of the chloroform anæsthesia. This was a comparatively easy task. The sudden and unexpected falls of blood pressure which the Glasgow Committee considered exceptionally dangerous, on no other grounds but the manometer tracing, having been proved by the Hyderabad Commission to be a safeguard, *a fortiori* the gradual falls must be a safeguard also. The problem solved itself at experiment 148. We discovered in this experiment that chloroform can be administered with perfectly uniform results. If chloroform is administered so that the breathing is natural and regular throughout the inhalation there are no irregularities in the fall of blood pressure and the pulse is unaffected. The intake or dose of the anæsthetic is regular, normal anæsthesia is promoted, and it is impossible to give the patient an overdose unless the administration is pushed beyond this point. On the other hand, if chloroform is given so as to interfere with the breathing, or when the breathing is in any way irregular, there are irregularities in the fall of the blood pressure and of the circulation, and these irregularities, together with various signs of vagus irritation, may manifest themselves in the pulse. Irregular breathing leads to irregularity of the intake or dose of chloroform, and it must be clearly understood that when the breathing is irregular or abnormal, overdosing may take place at any time during the inhalation. As the pulse is not affected in normal chloroform anæsthesia, it is useless to take it as a guide, and, *per contra*, as irregularities of the pulse are signs of interference with the breathing, (which includes overdosing) under chloroform, the chloroformist who watches the pulse does so for effects for which he alone is responsible.

I must now ask you to examine four instructive tracings which show the sequence of events in uncomplicated chloroform narcosis. These events are lowering of the blood pressure, with, first, anæsthetics, then stoppage of the respiration, and then death. Our methods of observation are too coarse to enable us to say when the respiration begins to fail. All we know is that if chloroform is passed beyond anæsthesia the function of respiration must be interfered with, and it is a matter of common observation that in many cases, clinically, narcosis of the respiratory centre undoubtedly commences before anæsthesia is complete. The early failure of the respiration which terminates in stoppage is amply sufficient to account for the weakening of the heart which occurs in overdosing with chloroform and ends in death. There are, however, considerable differences in the rapidity of the heart failure due to failure of the respiratory function. If you compare the Ludwig tracing 4 of Experiment 186 with the Ludwig tracing of Experiment 169 you will see that whereas the heart failed early in Experiment 169 it continued to beat with practically undiminished vigour for three full minutes after the entire cessation of respiration in Experiment 186. That this occurred with a mercurial manometer, and that the heart had to overcome the inertia of the mercury in order to produce this well-marked tracing shows how powerfully it was acting. There are, of course, differences in different person's hearts, just as there are differences in their faces and bodies generally; some are strong and fail slowly, others are weak and fail rapidly after the breathing ceases in chloroform poisoning. Finally, in this connection I must beg you to compare the Ludwig tracing 3 of Experiment 186 with the Ludwig tracing 2 of Experiment 162. Each of these tracings demonstrates that when the animal was over-dosed with chloroform its life was saved by the identical stoppage and slowing of the heart shown in the Glasgow trace which we have proved to be due to vagus irritation. In Experiment 186 the irritation of the vague was caused by electrical stimulation of the nerve. In Experiment 162 it came into play naturally when the animal's respiration ceased and was probably due to stimulation of the nerve by poisoned blood. Stoppage of the heart through the vagus has unquestionably saved many lives in accidental overdosing with chloroform, in

spite of the widespread belief that it means heart failure or syncope and that this belief has led to the modern practice of stimulation of the heart with ether, brandy, galvanism and inversion whenever an accident occurs. If stimulation of the heart has any effect at all it can only be to defeat the marvellous and safeguard action of the vagus nerve and so reduce to a minimum, if not altogether destroy, the patient's chance of recovery.

The above is a summary of the results of the main research of the Hyderabad Commission. The final and most difficult problem we had to face was: How to induce the profession to accept our conclusions? We hoped that physiologists would complete our work by showing the actual causes of the harmless falls of blood pressure under chloroform and whether at any period in chloroform poisoning the heart is directly affected. In this hope we have been disappointed. Trained physiologists cannot apparently divest their minds of the abstract idea which dominated the Glasgow Committee that a fall of blood pressure is necessarily dangerous and we have little or no help from them. Fortunately we no longer require it. During the last two months we have made a large number of cross-circulation experiments which sets all the questions in dispute about chloroform at rest and no further controversy is possible. The experiments were devised for us unwittingly by Drs. Gaskell and Shore. In their own words: "The necessary procedure for the successful carrying out of these experiments was, as may be imagined, long and laborious." In Hyderabad, however, we possess in Mr. Arthur Chamarettee, who is an old pupil of the local medical school, a genius at physiological experimentation. His skill and fertility of resource have overcome all obstacles, and the results have amply repaid all our trouble, as will be evident from the description of the experiments. In the cross-circulation experiments, "in order that chloroform, when inhaled in the ordinary way, could be carried to the brain or to the heart only, the circulation through the brain was separated from the general circulation and a supply of blood for the brain of what will be called the fed animal was obtained from another animal, the feeder." If the feeder is chloroformed, its chloroformed blood is conveyed direct to the fed's own heart and all its other organs except its brain. Practically, according to Drs. Gaskell and

Shore, the chloroform in the latter case is carried to the heart only. In the cross-circulation experiment of October 5th, 1892, chloroform was administered to the feeder and conveyed to the brain only of the fed. The tracing shows that in the fed the sequence of events was practically the same as it is in ordinary uncomplicated chloroform narcosis—viz., lowering of the blood pressure with, first, anæsthesia, then stoppage of the respiration, and then death. The fall of blood-pressure can only be due to the direct action of chloroform on the vaso-motor center. In the cross-circulation experiment of October 7th, 1892, chloroform was administered to the fed and carried to the fed's heart only and not to its brain. The tracing of this experiment shows that concentrated chloroform inhaled in the most rapid manner possible and conveyed to the heart only did not produce anæsthesia, or failure of the respiration, or fall of blood pressure; in fact it produced no effect on the animal of any kind. Taken together the two experiments complete and terminate the work of the Hyderabad Commission. They prove that chloroform has no direct action whatever on the heart, and consequently that the fall of blood pressure caused by the administration of chloroform is not due primarily or in any direct manner to a weakening of the heart's action. They further prove that the fall of blood pressure, which is a normal condition of chloroform anæsthesia, is due to the direct action of chloroform on the vaso-motor center in the medulla oblongate—i. e., to vaso-motor narcosis. It is for this reason that the fall of blood pressure is, as the Commission has never attempted to make its conclusions retrospective; personally I have had in times gone by far too many of what my friend Dr. Dudley Buxton calls "narrow shaves" to feel anything but the most profound sympathy for any man who has an accidental death under chloroform; but it is obvious henceforth, if chloroform is to be employed at all, it must be administered in accordance with the principles we have all along advocated. Now that chloroform syncope, that bogey of the trained physiologist, has been got rid of, and we know that the heart cannot be weakened under chloroform except by interference with the breathing, there need be no difficulty in recognizing the fact that it is useless and dangerous to take the pulse as a guide and that therefore the Commission has made good its

claim to have confirmed Syme's teaching: "We are guided as to the effect not by circulation but entirely by the respiration. You never see anybody here with his finger on the pulse." We have also proved that safety under chloroform can only be ensured by regular natural breathing, which it is the chloroformist's bounden duty to maintain throughout the whole administration.

In conclusion I have only to add that the work of the Hyderabad Commission has been accomplished solely through the right royal munificence of his Highness the Nizam of Hyderabad. It would perhaps be unbecoming in me to speak in the necessary terms of extravagant praise of his Highness's good deed, but this much we may say: as long as the profession of medicine lasts—and it will last forever—so long will the Nizam's name be famous all over the world.—*From London Lancet of Aug. 26th, 1893.—This being Surg.-Lieut.-Col. E. Lawrie's address, delivered before the officers of the Medicine Staff and Indian Medical Staff in the East Indes.*

Some Uses of Sodium Salicylate.—In an article on this subject published in a recent number of the *Union Medicale*, Dr. West is credited with recommending the use of the following formula in the treatment of amygdalitis: Sodium bicarbonate, one and a quarter drachms; glycerin, one ounce, peppermint water, three ounces. Of this a tablespoonful is to be taken every three or four hours. In the same article the following formula is mentioned as having been advised in stubborn cases of cold in the head: Sodium salicylate and syrup of orange peal, each, half an ounce; peppermint water, three ounces. A dessertspoonful to be taken every three or four hours until ringing in the ears is produced.—*N. Y. Med. Jour.*

Homicidal Cranks.—The recent shocking murder of Mayor Harrison calls attention again to the danger to which society is subjected by the half-mad. We cannot pretend to give a complete list of the assassinations and attempted assasinations of public men in this country and Europe during the past ten or twelve years. But our readers will recall the murder of Gar-

field, by Guiteau, the attempted murder of Frick, by a Jewish anarchist, the dynamiting of Russell Sage by Norcross, and the attempted shooting of the Rev. Dr. Hall. All these crimes were done by men of a somewhat similar character, and all sufferred from a somewhat similiar form of mental and moral perversion. The name which science gives to their malady is paranoia persecutoria. It is not, however, so much a real disease as it is an inherent defect in the structure of the brain.

This defect exists in many, but it is overcome and controlled by education and training. In the homicidal paranoiac natural defects and natural bad propensities are increased by bad habits of life and thought. For example, by the over-indulgence in alcohol, tobacco, and excitable haranguing, a man who has simply exaggerated political views becomes a political criminal or a murderer.

The question naturally arises whether the homicidal paranoiac has come with us to stay and to increase in numbers and activity. Already, it is necessary for public men to exercise care in admitting people to audience, and the life of the American millionaire, or high political functionary, is perhaps already quite as uneasy as was that of the Czar of Russia.

We see no immediate prospect of relief from this condition of things. Certainly lynching will do no good, though so strongly recommended by many. Whether such people should be hanged is a question to be decided in each individual case. In some instances it is surely necessary and helpful, even if from our standpoint it seems cruel. But cranks and paranaics will not be suppressed by hanging, because they often love notoriety more than they fear death, or are impelled to their act by a morbid instinct which no prospect of future punishment can suppress.

The paranoiac is the result of bad breeding, and he will flourish as long as neurotic people intermarry and give birth to children whose morbid tendencies are allowed to develop. To prevent the increase of the paranoiacs we need good fathers and mothers. —*Med. Record.*

Pathology of Influenza.—The author who is Prosector at the Marine Hospital, at St. Petersburg, furnishes a detailed ac-

count of forty cases of la grippe on which autopsies were performed (*St. Petersburg Med. Woch.*). These cases were all of individuals who were otherwise healthy. On microscopical examination of the voluntary muscles, he occasionally found loss of the striæ, however only in isolated muscle bundles. In three cases he discovered evidence of hemorrhage in the muscular tissue, and the resulting hematomas were so large that entire bundles of muscle-fibers were involved.

A closer microscopical examination disclosed the fact that there had been a parenchymatous bleeding, and probable a bleeding by diapedesis. In the vessels were found numerous small micro-organisms, and it may be inferred from this that there was nutritive disturbance of the vessels. As the hemorrhages were invariably unilateral, the author concludes that the lesion involves the sympathetic centers.

Pachymeningitis hemorrhagica interna he found only in one case, but in fifty per cent. of the cases there was a hyperema of the pia, and in two cases even bloody infiltration. Suppurative cerebral meningitis was found in one case. In those cases with bloody infiltration of the pia, there was found besides, hemorrhage into the lateral ventricles.

As a general rule, Kusskow found the heart muscle soft, friable and anemic.

A microscopic examination showed a classification of the muscle cells, with changes similar to those found in typhoid lesions of the bowels. Hyperemia and infiltration of the pharnyx and larynx, he found occurred quite frequently.

Careful examinations of the capillary vessels of the lungs and bronchi were made. The author calls special attention to the frequency of labor inflammation. In eight cases he found purulent infiltration, and of these six resulted in gangrene.

The gangrene spots as well as the purulent ones, were wedge-shaped, with their bases towards the pleura. Capillary thrombosis, such as is described by Klebs he seldom found, but when so found it occurred in fibrinous plugs. Venous thrombosis was much oftener discovered, as was also arterial thrombosis, but the latter not so frequently as the former.

The spleen, in the majority of cases was contracted; only twelve were found to be enlarged. These were also microscopi-

cally examined. Changes in the intestinal canal were often found. Peritonitis was never discovered, but the kidneys were usually affected.

In conclusion, the author decides, on the strength of his numerous investigations, that influenza may be divided into two forms: 1, hemorrhagic; 2, pyemic or septico-pyemic form, with purulent and gangrenous inflammation of the lung tissue and frequent metastases in other organs.—*Jour. Amer. Med. Ass'n.*

THE EMERGENCY TREATMENT OF A TOOTHACHE.—Toothache is a little thing in the books, but many physicians would rather meet a burglar at the door on a dark night than a call to cure a bad toothache of several day's continuance; a hypodermic of morphine only postpones the evil day, and usually the patient is respectfully referred to the dentist. The tooth should not be extracted while the jaw and gums are inflamed and the latter swollen, and it is the physician's duty to treat the case until the above conditions are removed. Always keep a small phial containg the following mixture: Chloroform, gtt. x.; glycerine, gtt. x.; sat. sol. ac. carbol., gtt. x.; morphine, gr. j., with a small wad of absorbent cotton. If the offending tooth has a cavity or decayed surface, saturate a small pellet of cotton with the above mixture and put into the cavity or against the decayed surface as the case may be, never pack the cotton in, or the more is the trouble—but have the pellet small enough to enter without crowding. In most cases this will end the trouble. When the gums are swollen and tender paint two or three times, two minutes apart, with a four per cent. solution of cocaine. This time of year your patient may have been eating a good deal of fruit. The tongue and mucous membrane of the mouth are pale sour stomach, and next day the toothache will return. Give ten grains of sub-carbonate of bismuth and ten grains of phenactin at once and a similar dose before each of the three following meals, with a laxative if needed, and stop all fruit for a few days, and it will not return. The same powder every two hours with cessation of fruit eating will stop the persistent, tormenting neuralgias so prevalent at this season.—*Jno. E. Weaver, M.D., of Rochester, N. Y., in Med. Record.*

ESTABLISHED 16 YEARS.

COLDEN'S

BEWARE OF IMITATIONS.

LIQUID BEEF TONIC

ORIGINAL COLDEN'S LIEBIG'S LIQUID EXTRACT OF BEEF AND TONIC INVIGORATOR. LABEL.

ESSENTIALLY DIFFERENT FROM ALL OTHER BEEF TONICS. UNIVERSALLY ENDORSED BY LEADING PHYSICIANS.

This preparation, consisting of the Extract of Beef (prepared by Baron Liebig's process), the best Brandy obtainable, Soluble Citrate of Iron, Cinchona and Gentian is offered to the Medical Profession upon its own merits. It is of inestimable value in the treatment of all cases of **Debility, Convalescence from Severe Illness, Anæmia, Malarial Fever, Chlorosis, Incipient Consumption, Nervous Weakness,** and maladies requiring a Tonic and Nutrient. It is quickly absorbed by the Stomach and upper portion of the Alimentary Canal, and therefore finds its way into the circulation quite rapidly.

COLDEN'S LIQUID BEEF TONIC appeals to the judgment of intelligent Physicians in the treatment of

All · Cases · of · General · Debility.

It is essentially a **Food Medicine** which gives **tone** and **strength** in cases where other remedies have failed or been rejected. A single trial will convince any fair-minded Physician of the value of this preparation.

By the urgent request of several eminent members of the medical profession, I have added to each wineglassful of this preparation two grains of Soluble Citrate of Iron, and which is designated on the label, **"With Iron, No. 1;"** while the same preparation, **Without Iron,** is designated on the label as **"No. 2."**

In order that Physicians unacquainted with

COLDEN'S LIQUID BEEF TONIC

may become familiar with it, we will upon application send a sample bottle free (express charges paid), to any Physician in the United States. Please ask your Dispensing Druggist (if he has not already a supply) to order it. In prescribing this preparation physicians should be particular to mention **"COLDEN'S,"** viz., **"Ext. Carnis Fl. Comp. (Colden)."** It is put up in pint bottles, and **can be had of Wholesale and Retail Druggists generally throughout the United States.**

C. N. CRITTENTON,

General Agent, - - - - - 115 FULTON STREET, NEW YORK.

GLENN'S SULPHUR SOAP.

Physicians know the great value of the local use of sulphur in the Treatment of Diseases of the Skin. Glenn's Sulphur Soap is the *Original* and *Best* combination of its kind, and the one now generally in use. For sale by All Druggists.

Beware of Counterfeits.

CONSTANTINE'S PINE TAR SOAP.

By far the Best Tar Soap made. Has been on trial among physicians for very many years as a toilet soap and healing agent, and its superior virtues have been unanimously conceded in all cases where the use of Tar is indicated. None genuine unless stamped A. A. CONSTANTINE'S PERSIAN HEALING PINE TAR SOAP. For sale by All Druggists.

Wholesale Depot, C. N. CRITTENTON, 115 Fulton Street, New York.

Samples of above Soaps SENT FREE, on application, to any Physician inclosing card.

PANOPEPTON

BREAD AND BEEF PEPTONE.

In Panopepton we present to the profession a new, complete and perfect peptone, one which we are confident will meet every requirement. Panopepton is the entire edible substance of prime lean beef and best wheat flour, thoroughly cooked, properly digested, sterilised and concentrated in vacuo.

Panopepton is therefore, the quintessence of peptones, containing all the nutrients of these two great types of food, beef and bread, fused into a delicious restorative.

The superiority of peptones from cooked foods over any form of raw, unsterilised beef is obvious. Sterilisation is an essential feature of the process for Panopepton, peptones not being coagulable at the boiling temperature, as are all other forms of albuminoids.

Panopepton contains not only such extractives, salts and savory matters, as are found in beef juices, beef tea, etc., but further and peculiarly, a solution of the whole substance of beef and bread.

Panopepton is the food par excellence in all conditions where a fluid, quickly assimilable, agreeable and comprehensive nutriment is required.

Originated and Manufactured by

FAIRCHILD BROS. & FOSTER,

New York.

Editorial.

"TE SALUTEM LAUDAMUR."

In meeting my many readers for a new year, what must I say to them? My friends will please accept my kindest and most sincere thanks for approval of my work in behalf of honest medicine. I have tried to do the best I could. If I have failed, place it down to my inablity and not my intention. With the hope that the future will be as bright as the past has been dark, I welcome the New Year, and I salute thee with praise.

IT MEANS BUSINESS.

The great city in front of the paludal marshes was said to be built on seven hills—each one higher than the other. Capitol Hill, in the City of Rocks, only holds secondary place to Old College Hill. On the latter was built one of the palatial residences of Nashville. It is now—thanks to God or the devil—in the hands of one Richard Douglas, who has fitted it up as a Gynecological Sanitarium. It stands in the middle of nearly three acres of ground. It has twenty-two rooms for patients, in every one of which the sun shines. Its location, its elligibility, its new hard-wood floors, its perfection in detail, are only in keeping with its beautiful and chaste operating theatre—a gem indeed—in which there is nothing superfluous, but everything right at hand for the operating surgeon or gynecologist.

THE ELEVENTH INTERNATIONAL CONGRESS.

The undersigned, Chairman of the American National Committee of the Eleventh International Medical Congress has received the following communications from the Secretary-General:

1. Papers to be read in any of the Sections of the Congress

should be announced on or before January 31st, 1894, to the Secretary-General, Prof. E. Maragliano, Ospedale Pammatone, Genova, Italy.

2. The title of the paper ought to be accompanied with a brief abstract of its contents and conclusions.

3. The programme to be distributed will contain the titles of all the papers announced before August 31st, 1893, and since.

4. The reductions granted by the railway companies months ago will be available from March 1st to April 30th, 1894.

In the interest of such medical men as will sail for Europe before official cards will have been received from the General Committee, the undersigned proposes to supply in as official a form as he thinks he is justified in doing, credentials which are expected to be of some practical value. It is suggested, besides, that a passport may increase the traveler's facilities.

Very respectfully,

A. JACOBI, M.D.

110 W. 34th Street, Dec. 10th, 1893.

REMEDY FOR SCARLATINA—CORRECTION.

In the December number of this journal was published under the head of *Correspondence*, a letter from an old and esteemed friend, who was so kind as to give me a prescription. Yet with one of those blunders of the typographical art a most egregious error was perpetrated. Dr. Franklin's prescription was as follows:

R. Tr. Ferri. Mur.
Tr. Cinchona.....aa f℥i
Quinine Sulph .....ʒij.
Aq. Dest.....f℥vj.

S. Sponge the patient from head to heels several times a day, and in convalescence or before if thought advisable, give a tablespoonful three or four times a day to grown persons; children in proportion.

It would be an excellent gargle at any time.

"WHEREAS, Dr. James E. Reeves, of Chattanooga, having denounced the so-called "Amick Cure" for consumption as a quack nostrum, and stated that its proprietor was not a physician

in good and regular standing, was accused of criminal libel; and

"WHEREAS, The Grand Jury has ignored the indictment brought against him, be it

"*Resolved*, That the Philadelphia County Medical Society congratulates Dr. Reeves on his bravery, a bravery unfortunately too rare at the present day, and tenders him sympathy in the persecution to which he has been subjected.

"*Resolved*, That no person who makes, deals in, or advertises as a cure a quack nostrum—that is to say, a preparation the composition of which is kept secret—can be termed a physician in good and regular standing, because such action is *ipse facto* sufficient to cause forfeiture of membership in this or any other county medical society governed by the laws of the American Medical Association.

"*Resolved*, That a copy of these resolutions, duly attested with the signature of the President and Secretary and with the seal of the society, be forwarded to Dr. Reeves, and that they be handed to the press for publication."

Passed unanimously at the meeting of the Society, October 18th, 1893.

PERSONAL.—We desire to acknowledge a call from the courteous representative of Messrs. Chas. H. Phillips & Co. He is so well known in the South—from Tennessee to Texas, that we will not trouble our printer to put his name in type. A most worthy representative of a most excellent house, whose goods can be always relied upon.

AMERICAN MEDICAL PUBLISHERS' ASSOCIATION.—The first annual meeting of this Association was held in the Grand Hotel, Cincinnati, on Monday, December 4, 1893, and steps were taken in the direction of active, routine work. The by-laws and rules were revised and amended, while the name was modified in accordance with a demand from medical publishers of a general nature who desired to become members of the Association. The active coöperation of every medical publisher is earnestly solicited. Next meeting in Washington, D. C., September, 1894.

Officers: President, Dr. Landon B. Edwards, Richmond, Va.; Vice-President, Dr. J. C. Culbertson, Cincinnati, O.; Treasurer, J. MacDonold, Jr., New York City. For application blanks and copies of the Articles of Association, address

CHARLES WOOD FASSETT, Secretary,
Cor. Sixth and Charles Sts., St. Louis, Mo.

THE undersigned, chairman of the American National Committee of the International Medical Congress, which was postponed from September 24th on account of cholera prevailing in Italy, has been notified by the Secretary-General that the Congress will be held at Rome from March 29th to April 5th, 1894 Instructions and documents relating to the journey, etc., are promised for the near future.

Yours very respectfully,
A. JACOBI, M.D.

THE THERAPEUTIC MERIT OF COMBINED REMEDIES.—The following excerpt from an article under the above caption, in the *Virginia Medical Monthly*, by Stephen J. Clark, M.D., No. 66 W. 10th Street, of this city, plainly outlines the useful combination of two leading remedies in materia medica:

"Binz claims specific antiseptic powers for quinia; other writers are in accord with him on this point, and report good results from large doses in septicæmia, pyæmia, puerperal fever, and erysipelas. It is a germ destroyer of the bacilli of influenza (la grippe). A full dose of quinine and antikamnia will promptly relieve many cases of this disease. In the gastric catarrh of drunkards this combination is valuable. Quinia is a poison to the minute organism—sarcina; and antikamnia exerts a soothing, quieting effect on the nerve filaments. A full dose of antikamnia and quinia will often arrest a commencing pneumonia or pleuritis. This combination is also useful in the typho-malarial fever of the South—particularly for the hyper-pyrexia—both quinia and antikamnia, as previously said, being decided fever reducers. The combination of antikaminia with quinia is valuable in the racking headache, with high fever, at-

tendant upon malarial disorders. It is likewise valuable in cases of periodical attacks of headache of non-defined origin; of the so-called bilious attacks; of dengue; in neuralgia of the trigemini; in that of 'ovarian catarrh'; and, in short, in nearly every case where quinine would ordinarily be prescribed."—*New York Medical Journal*, Nov., 1893.

CREASOTE.—The intrinsic value of creasote as a remedy in phthisis is now fully recognized, and its repulsive taste and odor, and the serious derangement of digestion which it almost invariably causes, have hitherto proved insurmountable objections to its use except in rare cases.

A series of careful experiments and clinical tests have demonstrated that Maltine with Cod-Liver Oil (containing 30 per cent. best Norwegian oil) form an excipient for creasote which wholly overcomes these objections, because it effectually disguises the disagreeable pungent taste and odor, obviates regurgitation or derangement of digestion, retains fully the virtues of the creasote, and forms a valuable adjunct by reason of its reconstructive and digestive properties.

The following formula has been employed with most gratifying results in a number of cases, and is respectfully submitted with the conviction that it will prove a useful suggestion to physicians seeking a satisfactory method of administering this drug:

℞ Maltine with Cod-Liver Oil.....16 f℥
Beech-wood Creasote..... 2 f℥
Oil of Lemon.....12 *m*
Oil of Bitter Almonds..... ..... 8 *m*

The proportion of creasote can, of course, be increased or decreased if desired.

When vigorously triturated, the Maltine with Cod-Liver Oil being added to the Creasote gradually, the incorporation will be perfect and the mixture will keep for a long time. It can be given in tablespoonful doses in water, milk, wine, or any desirable liquid; or it can be taken clear. If for any reason the Cod-Liver Oil is not desired, "Maltine Plain" can be substituted, but the incorporation will not be so perfect.

FOR THE TEETH.—One of the most skillful dentists in New York gives these rules for the care of the teeth:

Use a soft brush and water the temperature of the mouth. Brush the teeth up and down in the morning, before going to bed, and after eating, whether it is three or six times a day. Use a good tooth powder twice a week, not oftener, except in a case of sickness, when the acids from a disordered stomach are apt to have an unwholesome effect upon dentine. Avoid all tooth pastes and dentifrices that foam in the mouth; the lather is a sure sign of soap, and soap injures the gums, without in any way cleansing the teeth.

The very best powder is of precipitated chalk; it is absolutely harmless and will clean the enamel without affecting the gums. Orris root or a little winter green added gives a pleasant flavor, but in no way improves the chalk. At least a quart of tepid water should be used in rinsing the mouth. A teaspoonful of Listerine in half a glass of water used as a wash and gargle after meals is excellent; it is good for sore or loose gums; it sweetens the mouth, and is a valuable antiseptic, destroying promptly all odors emanating from diseased gums and teeth. Coarse, hard brushes and soapy dentifrices cause the gums to recede, leaving the dentine exposed. Use a quill pick if necessary after eating, but a piece of waxed foss is better. These rules are worth heeding.

Be assured of the genuine Listerine by purchasing an original bottle.

MESSRS. H. K. WAMPOLE & Co., Philadelphia, Pa. Gentlemen: I wish to inform you of the very satisfactory results obtained from my use of "Asparoline." I have put it to the most crucial test, and it has never failed to give the desired effect.

I first used it in a case of "Dysmenorrhœa," of four years standing; the worst case I have ever seen; one grain of Morph. Sulph. would relieve for not more than half an hour. The 2 oz. bottle of "Asparoline" was given her, and it afforded more relief than had ever been experienced from any previous remedy.

The second catamenial period following its use was unattended

Gastric Derangements.

HOSFORD'S ACID PHOSPHATE

Unlike all other forms of phosphorus in combination, such as dilute phosphoric acid, glacial phosphoric acid, neutral phosphate of lime, hypophosphites, etc., the phosphates in this product are in solution, and readily assimilated by the system, and it not only causes no trouble with the digestive organs, but promotes in a marked degree their healthful action.

In certain forms of dyspepsia it acts as a specific.

Dr. T. G. COMSTOCK, of the Good Samaritan Hospital, St. Louis, says: "For some years we have used it in a variety of derangements characterised by debility, as also in chronic gastric ailments. It is approved of unanimously by the medical staff of this hospital."

Send for descriptive circular. Physicians who wish to test it will be furnished on application, with a sample, by mail, or a full size bottle without expense, except express charges.

Prepared under the direction of Prof. E. N. HORSFORD, by the

RUMFORD CHEMICAL WORKS, Providence, R. I.

Beware of Substitutes and Imitations.

A Vitalizing Tonic to the Reproductive System.

SANMETTO

—FOR—

GENITO-URINARY DISEASES.

☞ A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

SPECIALLY VALUABLE IN

Prostatic Troubles of Old Men--Pre-Senility,
Difficult Micturition--Urethral Inflammation,
Ovarian Pains--Irritable Bladder.

POSITIVE MERIT AS A REBUILDER.

DOSE:—One teaspoonful four times a day.

OD CHEM. CO., NEW YORK.

by any pain, and only one teaspoonful was then taken. The patient now describes her periods as painless.

I have used "Asparoline" in Post-Partum pains, in the menopause and in Menorrhagia, and I am convinced that if there is a panacea for uterine or ovarian diseases, "Asparoline" is that panacea.

Wishing you success in its introduction to the medical profession, I am, Yours very truly,

F. C. BRUCE, M.D.

A WORD TO THE WISE.—Dr. A. B. Pope, lecturer on diseases of the heart and lungs at the New York Polyclinic, has used "Maltine with Cod-Liver Oil" as a vehicle for creasote extensively, and found it to be the most satisfactory way of giving creasote of which he knows. The formula was originated at his instance at the Demilt Dispensary and first used by him there. Dr. Pope says, "In cases of tuberculosis it is often desirable that the patient have cod-liver oil, creasote and a digestive agent like Maltine, and this combination fills the bill, giving excellent results, and at the same time rendering it unnecessary to have three prescriptions on hand at once."

The formula referred to is as follows;

Maltine with Cod-Liver Oil	16 fl. oz.
Beech-wood Creasote	2 fl. drs.
Oil of Lemon	12 minims.
Oil of Bitter Almonds	8 minims.

M. Triturate, and add creasote gradually. S. Tablespoonful at each meal. It may be given in water, beer, wine or milk.—*The Dietetic and Hygienic Gazette.*

IT affords me great pleasure in saying that I have had signal success with Cactina Pillets in various forms of heart disease, in alcoholism, excessive tobacco use, more especially chewing. Cactina Pillets are invaluable. I shall continue to prescribe them.—THOMAS W. WEBB, L.R.C.P., L.M., 33 O'Connell St., Waterford, Ireland.

CEREBRAL SEDATIVE.—The Elixir Six Bromides, which is happily combined with Cannabis Indica, is a most reliable cere-

bral sedative in controlling nervous headache, hysteria, delirium epileptic and eclamptic convusions, and other ailments caused by nervous irritation. When the preparation is slow in bringing about results in insomnia and delirium we have found hydriodate of hyoscine succeed in procuring refreshing sleep in fifteen minutes. It may be given by the mouth in 1-100 grain doses, but if given hypodermically 1-200 grain is sufficient. Ordinarily we find the Elixir Six Bromides the most prompt, safe, and valuable of the group of cerebral sedatives.

---

medical profession in these United States than any other combination of druggists or doctors. They have had their emissaries traveling the wilds of South America, South Africa, and the most distant parts of the Globe, hunting for the most approved drugs with which to relieve human suffering. Their success is their emblem and merit.

INFANTILE CONVULSIONS.—Dr. J. P. Prestly, of Chicago, in the *N. Y. Medical Journal*, recommends the hypodermatic injection of 5 grains Chloral Hydrate in a child two years old as a most gratifying mode of treatment in these trying cases.

A. C. BERNAYS, M.D., Professor of Surgery, Marion-Sims College, St. Louis, Mo. writes as follows to the Dios Chemical Co: "I have used Sennine in a great many cases and can recommend it conscientiously. Send one-half dozen to the City Hospital at once."

SANDER & SONS' Eucalypti Extract (Eucalyptol).—Apply to Dr. Sander, Dillon, Iowa, for gratis-supplied samples of Eucalyptol and reports of cures effected at the clinics of the Universities of Bonn and Griefswald. Meyer Bros.' Drug Co., St. Louis and Kansas City, Mo., Dallas, Texas, and New York, sole agents.

WAYNE'S APHRODISIAC TABLET is a combination that should meet with the approval of the scientific and practical physician. Try it, and you will be pleased with it.

HOSPITALS, DISPENSARIES, AND NURSING. Edited by J. S. Billings, M.D., Surgeon, U. S. A., and Henry M. Hurd, M.D., Supt. of The Johns Hopkins Hospital. Price, bound in cloth, delivered, $5.00 per copy, is the title of a new book to be issued January 1, 1894. Well, it ought to be a good one.

Reviews and Book Notices.

DUANE'S STUDENTS' DICTIONARY OF MEDICINE. The Student's Dictionary of Medicine and the Allied Sciences. Comprising the Pronunciation, Derivation and Full Explanation of Medical Terms, together with much collateral descriptive matter, numerous tables, etc. By ALEXANDER DUANE, M.D., Assistant Surgeon to the New York Ophthalmic and Aural Institute; Reviser of Medical Terms for Webster's International Dictionary. In one royal octavo volume of 658 pages. Cloth, $4.25; half leather, $4.50; full sheep, $5.00. LEA BROTHERS & Co., Publishers, Philadelphia. 1893.

This work has received years of the most painstaking labor of a gentleman abundantly qualified by natural gifts and special training for the difficult task just completed. The volume is one of high merit, and we anticipate for it rapid recognition as the standard medical dictionary for students.

Dr. Duane's experience as a medical lexicographer and his accurate scholarship are sufficiently attested by his position as Reviser of Medical Terms for *Webster's International Dictionary*. In the present work he has undertaken to provide medical students with full information concerning every word they will meet in acquiring their professional education. The vocabulary is exceedingly liberal, and its fullness is parralleled by the treatment accorded to each word. The definitions are of the "explanatory" style, including not only a statement of meaning, but likewise much descriptive matter under headings which would be inadequately represented by a definition however full. Thus, under Diseases are given their causation, symptoms and treatment; under important Organs, an outline of their structure and functions; under each Drug, its actions, uses and preparations, the information being arranged in logical order, so as to give a rational and connected idea of the subject. Extensive tables of Bacteria, Muscles, Arteries, Veins, Nerves, etc., are included. Each word is followed by its correct pronunciation (a new feature in works of this class), and not appreciated by the blocky editor of the *Amer. Med. Ass'n. Journal*, given by

means of a simple and obvious phonetic spelling. Derivation, an unexcelled aid to remembrance of meanings, is likewise fully and clearly stated, Greek letters being replaced with those of the English alphabet, for the convenience of those unfamiliar with Greek, (and who is not)? The type has been carefully selected for legibility, and each page contains an extraordinary amount of matter. *Duane's Medical Dictionary* is executed on a plan embodying in a high degree every qualification of value to students, and we may therefore confidently predict that it will become the standard and favorite work of its class.

THE PRINCIPLES AND PRACTICE OF SURGERY. By JOHN ASHHURST, JR., M.D., Barton Professor of Surgery and Clinical Surgery in the University of Pennsylvania; Surgeon to the Pennsylvania Hospital, Philadelphia. New (6th) edition, enlarged and thoroughly revised. In one octavo volume of 1161 pages, with 656 engravings and a colored plate. Cloth, $6.00, leather, $7.00. LEA BROTHERS & Co., Publishers, Philadelphia. 1893.

The demand for six editions of the work of so distinguished a surgeon, though it was to be expected, is none the less gratifying. His well-known literary skill is shown in the presentation, within the limits of a single convenient volume, of a comprehensive description of modern surgical practice with a plain statement of the principles upon which it is based. Like its predecessors the present edition has been placed thoroughly in accord with the foremost state of its subject at the date of issue. The author has made a new departure in confiding certain subjects to gentleman who have made them a special study. Thus Professor C. B. Nancrede has contributed an entirely new chapter on Surgical Bacteriology; and the subjects of Gynecology, Ophthalmology and Otology have been revised respectively by Professors B. C. Hirst, G. E. De Schweinetz and B. A. Randall. Much space has been saved by eliminating material having only indirect importance for the practical surgeon, but the volume has nevertheless increased in size as well as in illustrations.

In revising his work for a sixth edition, the author has spared no pains to render it worthy of a continuance of the favor with which it has heretofore been received, by incorporating in it an account of the more important recent observations in Surgical

Science, and of such novelties in Surgical Practice as have seemed to him to be really improvements, and by making such changes as have been suggested to him by enlarged personal experience as a Clinical Teacher and practical Hospital Surgeon.

The arrangement of the volume is the same as in preceding editions; all parts having been fully and carefully revised. The series of illustrations has been much improved by the use of a number of original cuts, chiefly from photographs, and of a colored plate containing seven figures, illustrative of Bacteriological subjects. The handsome volume is dedicated to the Surgeons and Students of Surgery of America, for whose use it is designed, and who will find it a most valuable aid in their labors.

NEW TRUTHS IN OPTHALMOLOGY, as Developed by G. C. SAVAGE, M.D., Professor of Ophthalmology in the Medical Departments of the University of Nashville and Vanderbilt University. Illustrated. Printed at the Publishing House of the M. E. Church, South. 1893.

The works on medical subjects printed by Nashville men are few and far between, but they have always been good ones. Not being a specialist, I ought not to review this little gem of the book-maker's art, yet I cannot afford to let it go by unnoticed. It has some important facts that ought to be distributed over this wide world broadcast. The author is a most earnest, careful and progressive man of science. His work in the department of eye diseases has been a most marked success in Nashville. He is a credit to his profession and an honor to the Capital City of Tennessee.

SAUNDER'S QUESTION COMPENDS, No. 12. Essentials of Minor Surgery, Bandaging, and Venereal Diseases. Arranged in the form of Questions and Answers, Prepared especially for Students of Medicine, by Edward Martin, A.M., M.D., Clinical Professor of Genito-Urinary Diseases; Instructor in Operative Surgery and Lecturer in Minor Surgery, University of Pennsylvania; Surgeon to the Harvard Hospital; Assistant Surgeon to the University Hospital, etc., etc. 12 mo. cloth, pp. 166, with 78 illustrations, 2nd edition, revised and enlarged. Price, $1.00. W. B. SAUNDERS, Publisher, 928 Walnut Street, Philadelphia. 1893.

This little volume, that was so well received by both teachers of minor surgery and students of medicine, has been thoroughly

revised and brought up to the present standard of surgical practice.

A large number of the illustrations have been redrawn and engraved, and an entirely new set of bandaging cuts inserted; for these, as well as the descriptions, the author acknowledges his indebtedness to that most excellent work, so comprehensive, reliable and satisfactory, *The American Text Book of Surgery*.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN. For the use of Students and Practitioners. By J. NEVINS HYDE, A.M., M.D., Professor of Dermatology and Venereal Diseases in Rush Medical College, Chicago. New (3d) edition. In one octavo volume of 802 pages, with 9 plates of which 3 are colored, and 108 engravings. Cloth, $5; leather, $6. LEA BROTHERS & Co., Publishers, Philadelphia. 1893.

The steadily increasing esteem in which Professor Hyde's book is held is shown by the early demand for a third edition. It is widely used as a text book, and not less widely as a work of practical use to the physician and specialist, its wealth of therapeutical matter being sufficient to account for this evidence of favor. The author has revised every page to make it accord with the latest approved views, and the enlargement of one hundred pages is paralleled by an increase in the illustrations and colored plates. The volume is clearly one which has been pronounced satisfactory by the profession.

Thirty-five new diseases are with greater or less fullness considered in this handsome edition. The chapter on tuberculosis has been wholly rewritten and considerably enlarged in order to embrace fully this important subject from the point of view of the recent developments in bacteriology and histology.

The classification of the American Dermatological Association is pretty clearly adhered to, by which the author has been able to keep pace with the variation demanded by the later advances in dermatology. The coccogenous and bacilogenous dermatoses of inflammatory types having been grouped together under a common heading.

It is truly a most excellent work which we can heartily commend in every particular, subject-matter, illustrations and mechanical execution.

FUNNY BONE, a book of mirth, for doctors, druggists, dentists, medical students and others, containing funny sayings, jokes, good stories, dialogues, conundrums, ludicrous things, ditties, etc., from a great many sources, with over 150 new and original comic illustrations. By Dr. L. CRUSIUS, Ph. G.. All of which pertain to the medical and pharmaceutical professions. Mailed upon receipt of price, 50 cents. THE FUNNY BONE PUBLISHING CO., Publishers, 1421 Market Street, St. Louis, Mo.

THE SECOND EDITION of the December World's Fair Cosmopolitan brings the total up to the extraordinary figure of 400,000 copies, an unprecedented result in the history of magazines. Four hundred thousand copies—200 tons—ninety-four million pages—enough to fill 200 wagons with 2000 pounds each—in a single line, in close order, this would be a file of wagons more than a mile and a half long. This means not less than 2,000,000 readers, scattered throughout every town and village in the United States. The course of the Cosmopolitan for the past twelve months may be compared to that of a rolling snowball; more subscribers mean more money spent in buying the best articles and best illustrations in the world; better illustrations and better articles mean more subscribers, and so the two things are acting and reacting upon each other until it seems probable that the day is not far distant when the magazine publisher will be able to give so excellent an article that it will claim the attention of every intelligent reader in the country.

AMERICAN TEXT BOOK OF GYNECOLOGY.—Mr. W. B. Saunders, publisher, Philadelphia, Pa., announces this work as ready for early issue. It is the joint work of Drs. Howard Kelley, Pryor, Byford, Baldy, Tuttle, and others, who stand before the profession for all that is progressive in gynecology. The work will contain operations not before described in any other book—notably ablation of fibroid uterus. It is designed as a profusely illustrated reference book for the practitioner, and every practical detail of treatment is precisely stated.

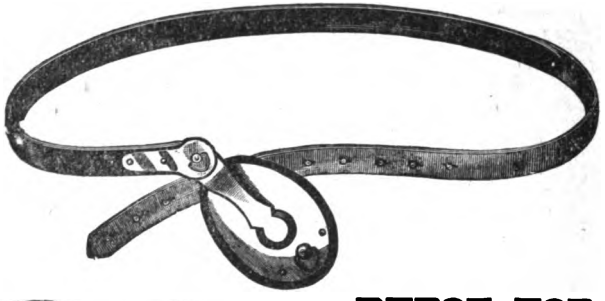
THEO. TAFEL

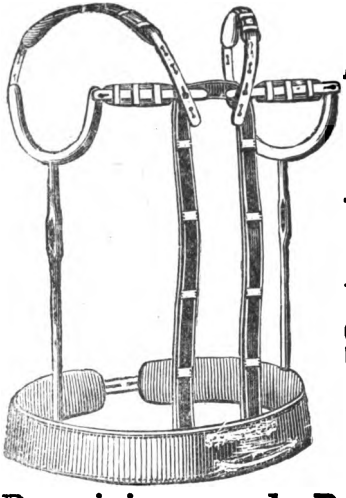
Manufacturer of and Dealer in

SURGICAL

Instruments and Appliances

OF ALL KINDS,





DEPOT FOR

ANTISEPTIC SUPPLIES

—SUCH AS—

Antiseptic * Gauzes,

Catgut, Silk,

And all Articles for Surgical Dressing.

Full line of

Surgical Instruments of all kinds:

TRUSSES, BRACES,

Elastic Stockings, Supporters,

Rubber Goods, Fever Thermometers, Etc.

Special attention given to orders for

Deformity Apparatus.

Repairing and Polishing Instruments

Promptly attended to.

Correspondence Solicited. Address

THEO. TAFEL,

Surgical Instrument Maker.

OUR READERS will please examine the wrapper of this journal and see the date to which their subscription is paid. *If time is out a remittance is in order.* If the date is incorrect a postal card or other notification will be appreciated. Please don't forget our terms—ONE DOLLAR A YEAR IN ADVANCE.

MEDICAL DEPARTMENT
OF THE
UNIVERSITY OF TENNESSEE,
Nashville Medical College,

Broad Street, between Vine and High.

FACULTY.

CHARLES W. DABNEY, Ph.D., LL.D., President of the University.
HON. WM. P. JONES, M.D., President of the Faculty.
DUNCAN EVE, A.M., M.D., Dean of the Faculty.

DUNCAN EVE, A.M., M.D.,
Professor of the Practice of Surgery, Orthopædic and Clinical Surgery.

J. S. CAIN M.D.,
Professor of Principles and Practice of Medicine and General Pathology.

J. BERRIEN LINDSLEY, D.D., M.D.,
Professor of Medical Chemistry and State Medicine,

J. BUNYAN STEPHENS, M.D.,
Professor of Obstetrics and Clinical Midwifery.

W. D. HAGGARD, M.D.,
Professor of Gynæcology and Diseases of Children.

W. M. VERTREES, M.D.,
Professor of Materia Med. & Therapeutics.

PAUL F. EVE, M.D.,
Professor of the Principles of Surgery, Operative and Clinical Surgery.

W. E. McCAMPBELL, A.M., M.D.,
Professor of General, Descriptive and Surgical Anatomy.

JOHN A. WITHERSPOON, M.D.,
Professor of the Theory and Practice of Medicine and Medical Hygiene.

T. HILLIARD WOOD, M.D.,
rofessor of Physiology and Physiological Anatomy.

J. G. SINCLAIR, M.D.,
Professor of Clinical Diseases of the Eye, Ear and Throat.

WM. G. BRIEN, M.D., LL.D.,
Professor of Medical Jurisprudence.

WM. F. GLENN, M.D.,
Professor of Venereal Diseases.

HALEY P. CARTWRIGHT, M.D.,
Professor of Physecal Diagnosis.

CHARLES MITCHELL, M.D.,
Professor of Microscopy and Histology.

R. B. LEES, M.D., D.D.S.,
J. P. GRAY, M.D., D.D.S.,
Professors of Dental Surgery.

J. CRIDDLE WHARTON, Phar.D.,
Prof. Analytical Chemistry and Pharmacy.

ROSS DUNN, M.D.,
Lecturer on Special Therapeutics.

HUGH R. MILLER, M.D.,
Demonstrator of Laboratory Microscopy and Bacteriology.

JAMES W. HALE, M.D.,
Demonstrator of Minor Surgery.

JAMES S. WARD, M.D.,
Demonstrator of Laboratory Chemistry.

JAMES W. HANDLY, M.D.,
Lecturer on Genito-Urinary Diseases.

JAMES M.COYLE, M.D.,
Instructor in Clinical Medicine.

JAMES W. HANDLY, M.D.,
ROSS DUNN, M.D.,
Demonstrators of Anatomy.

HOSPITAL AND COLLEGE CLINICS.

Clinical lectures will be delivered at the City Hospital and St. Margaret's Hospital regularly during the session, in which a great variety of diseases not usually met with by the general practitioner will be brought before the class for treatment or operation.

Our Free College Clinic and out-door service will enable us to offer, at our College Ampitheatre, an abundance of practical clinical observation to the students, and our College surgical work is probably surpassed by but few schools in the country.

Session of 1893-94 will begin Monday Oct. 2, 1893.

PRELIMINARY TERM WILL BEGIN MONDAY, SEPTEMBER 4; 1893.

For particulars, address

DUNCAN EVE, A.M., M.D., Dean, NASHVILLE, TENN.

NEUROSINE,

The Most Powerful Neurotic Attainable, ANODYNE AND HYPNOTIC.

An efficient and permanent preparation **REMARKABLE** for its efficacy and **THERAPEUTIC EFFECTS** in the treatment of those **NERVOUS AFFECTIONS** and morbid conditions of the System which so often tax the skill of the Physician.

A reliable and trustworthy remedy for the relief of Hysteria, Epilepsy, Neurasthenia, Mania, Chorea, Uterine Congestion, Migraine, Neuralgia, all Convulsive and Reflex Neuroses, The Remedy Par Excellence in Delirium and Restlessness and Fevers.

FORMULA.—Each fluid-drachm contains 5 grains each, C. P. Bromide of Potassium, Sodium and Ammonium, 1-8 gr. Bromide of Zinc, 1-64 gr. each of Ext. Belladonna and Cannabis Indica, 4 gr. Ext. Lupuli and 5 minims fluid Ext. Cascara agrada, with Aromatic Elixirs.

DOSE.—From one teaspoonful to a tablespoonful, three or more times daily, as may be directed by the Physician.

To any physician, unacquainted with the medical effect of **NEUROSINE**, we will, if requested, send trial bottle free, they paying express charges.

DIOS CHEMICAL CO. **ST. LOUIS, MO., U. S. A.**

This Supporter Complete, with one cup (your choice) only $2.35 post paid. Other instruments equally as cheap; write for those you need to

THE ILLUSTRATED MEDICAL JOURNAL CO.,
INSTRUMENT DEALERS,
DETROIT, - - MICHIGAN.

For information and free Handbook write to MUNN & CO., 361 BROADWAY, NEW YORK. Oldest bureau for securing patents in America. Every patent taken out by us is brought before the public by a notice given free of charge in the

Scientific American

Largest circulation of any scientific paper in the world. Splendidly illustrated. No intelligent man should be without it. Weekly, **$3.00** a year; $1.50 six months. Address MUNN & CO., PUBLISHERS, **361** Broadway, New York City.

DO YOU EVER USE

FINE WINES, BRANDIES, or WHISKIES in your practice? If so, we carry the finest line in the South of the following, and guarantee their purity:

WHISKIES.—Cascade, Old Crow, and Golden Wedding. Sold by the pint or gallon.

WINES (bottled).—Port, Catawba, Sherry, Claret, and Imported and Domestic Champagnes.

BLACKBERRY CORDIAL, prepared by ourselves from fresh berries with Brandy and Aromatics.

BRANDIES (bottled).—Pinet, Castillon & Co.; Sazerac, this brandy is especially recommended by our physicians; California Brandy, Old North Carolina Apple Brandy.

GENUINE HOLLAND GIN AND JAMAICA RUM.

☞ Orders from the country promptly filled.

Send for our complete price list. Special prices to physicians.

DEMOVILLE & CO.,
Corner Church and Cherry Streets, Nashville, Tenn.

ROBINSON'S HYPOPHOSPHITES,

NUTRITIVE, TONIC, ALTERATIVE,

A Favorite Remedy in the Treatment of

PULMONARY PHTHISIS, BRONCHITIS, SCROFULOUS TAINT, GENERAL DEBILITY, ETC.

Stimulates Digestion and Promotes Assimulation.

FORMULAE.

℞ Each fluid ounce contains:

Hypophosphites Soda	2 grains.
Lime	1½ "
Iron	1½ "
Quinine	¾ "
Manganese	¼ "
Strychnine	1½ "
	1-16 "

DOSE.—One to four fluid drachms. **PINT BOTTLES, $1.00.**

This preparation does not precipitate, retains the salts in perfect solution.

N, B.—Physicians will find a combination of our Hypophosphites with our Wine Coca will yield most happy results, patients receiving the immediate stimulating effect of the Wine and permanent tonic effect of the Syrup. **PRICE, WINE COCA, PINT BOTTLES, 1 00.**

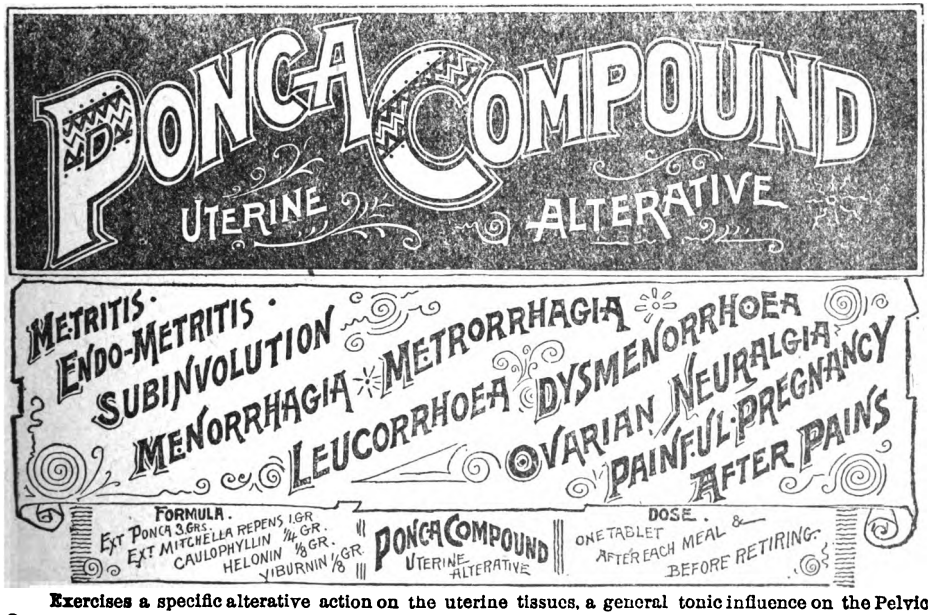
MANUFACTURE ALSO ROBINSON'S

Hypophosphites with Wild Cherry Bark, a very Valuable Combination.
Lime Juice and Pepsin, Valuable Digestive Agent.
Phosphoric Elixir, Modified form Chemical Food.
Elixir Paraldehyd, Hypnotic, Sedative, Anodyne,
Wine Coca, Nerve Stimulant.
Aromatic Fluid Pepsin, Dyspepsia, Indigestion, or any digestive Disorder.
Colorless Hydrastis.

Specify **ROBINSON'S** in prescribing. For Sale by Druggists.

ROBINSON-PETTET CO., Manufacturing Pharmacists,

Samples gratis to Practitioners they paying expr'ge. LOUISVILLE, KY.



Exercises a specific alterative action on the uterine tissues, a general tonic influence on the Pelvic Organs; has a tendency to absorb plastic deposits, to regulate the vascular supply. to relieve congestion, to tone up the nerve forces, to encourage peristalsis of the bowels, and to remove spasmodic conditions.

100 TABLETS MAILED ON RECEIPT OF $1.00.

MELLIER DRUG CO NO 109. WALNUT ST. ST LOUIS MO.

BELLEVUE HOSPITAL MEDICAL COLLEGE,

CITY OF NEW YORK.

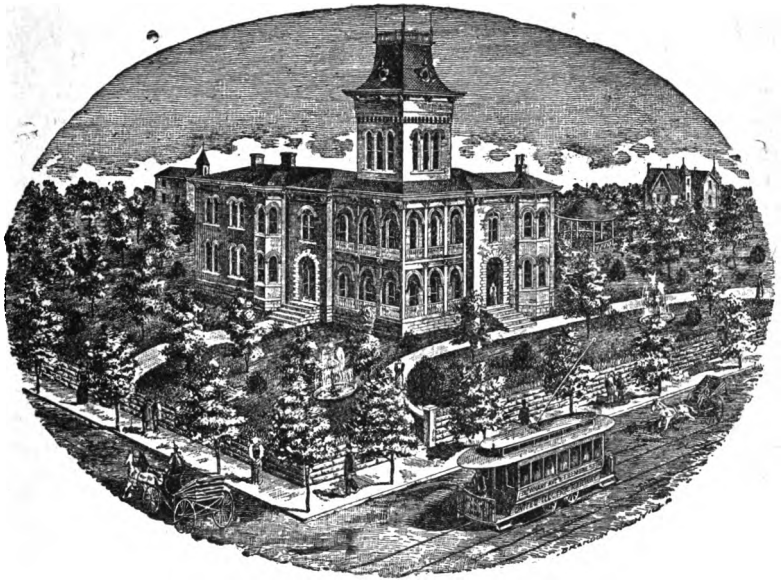
SESSIONS OF 1894-95.

The REGULAR SESSION begins on Monday, September 24, 1894, and continues for twenty-six weeks. During this session, in addition to the regular didactic lectures, two or three hours are daily allotted to clinical instruction. Attendance upon three regular courses of lectures is required for graduation. The examinations of other accredited Medical Colleges in the elementary branches are accepted by this College.

The SPRING SESSION consists of daily recitations, clinical lectures and exercises, and didactic lectures on special subjects. This session begins March 25, 1895, and continues until the middle of June.

The CARNEGIE LABORATORY is open during the collegiate year for instruction in microscopical examinations of urine, practical demonstrations in medical and surgical pathology, and lessons in normal histology and in pathology, including bacteriology.

For the annual Circular, giving requirements for graduation and other information, address Prof. AUSTIN FLINT, Secretary, Bellevue Hospital Medical College, foot of East 26th Street, New York City.



DR. RICHARD DOUGLAS'

PRIVATE SANATORIUM FOR WOMEN,

Nashville, Tennessee.

Location high. Grounds large. House elegantly fitted with all modern conveniences, Trained nurses. Thoroughly equipped in every detail for the management of Gynæcological cases and abdominal surgery. Every effort is made to carry out the rules of aseptic surgery

For further information address, **DR. RICHARD DOUGLAS,**

Or, DR. O. H. WILSON, Associate. Nashville, Tenn.

ELIXIR SIX IODIDES

This Elixir is prepared from the Chemically Pure Salts.

FORMULA:

Each fluid drachm contains Arsenici Iodidum 1-125 gr., Ferri Iodidum 1-12 gr, Hydrargyri Iodidum 1-12 gr., Manganesii Iodidum 1-10 gr., Potassii Iodidum one gr., Sodii Iodidum one gr., with Aromatics.

MEDICAL PROPERTIES:

The greatest **value** of this **combination** is it relieves those **obscure** and **chronic obstructions** to **gland action**—the **kidney, liver, pancreas** as well as the **lymphatic system**, which may exert so great an influence for evil on the economy. It enjoys the confidence of the Medical profession, as its use is indicated in a wide range of diseases, particularly so in **pernicious anæmia, skin diseases**, both **scaly** and **papular**; has remarkable curative effects in **specific diseases** and other manifestations of **systemic infection, chronic uterine** and **pelvic diseases**, and in complaints where an **alterative** and **tonic** is indicated.

Elixir Six Iodides—WALKER GREEN'S—**One Bottle.**

The druggist will please write directions on his own label.

Attention is also called to our **Elixir Six Bromides, Elixir Six Hypophosphites, and Elixir Six Aperiens,** which are unexcelled for palatability and clinical efficiency.

Wholesale Price per Dozen.—Iodides $8; Hypophosphites $6: Bromides $6: Aperens $4.

Send for descriptive circular. These Elixirs are kept in stock by Wholesale Druggists generally throughout the United States.

THE WALKER-GREEN PHARMACEUTICAL CO., (Incorporated.)

No. 180 W. Regent Street, Glasgow, Scotland, and Kansas City, U. S. A.

Samples of the four Elixirs will be sent to any physician, prepaid, on receipt of $1.00.

THE SOUTHERN PRACTITIONER

AN INDEPENDENT MONTHLY JOURNAL,

DEVOTED TO MEDICINE AND SURGERY.

DEERING J. ROBERTS, M.D.,

EDITOR AND PROPRIETOR,

Late Professor of Theory and Practice of Medicine in the Medical Department of the University of Tennessee.

Lowest Rates of Any Medical Periodical Containing as Much Good and Reliable Reading-matter Published in America.

CONTAINS FORTY-EIGHT PAGES OF READING-MATTER EACH MONTH.

SUBSCRIPTION PRICE IS ONLY

ONE DOLLAR PER YEAR

* ——— IN ADVANCE. ——— *

Original Essays, Original Communications, Clinical Reports of Interesting Cases, Reprints of Interesting Articles, Results of experiments with Old and New Remedies, Proceedings of Medical Societies, Extracts from Medical Journals, Bibliographical Notices and Reviews, Medical Items, and Editorial Comments, will constitute the subject matter of each monthly issue. Its pages will at all times be open to anything that pertains to progress in medicine and surgery.

To hard-worked medical men, with a limited time for reading, and few opportunities for professional conversation, such a journal as this, bringing every month the latest ideas in medical practice and the latest records of important cases, ought to be invaluable. As a medical periodical that is within the reach of every professional reader, we respectfully submit it to your consideration. Subscriptions—*Only One Dollar per Year Postage Included*—are respectfully solicited.

Correspondence and Reports of cases are requested from all regular Practitioners and Medical Organizations.

With the initial number of 1892, I have made a contract with JNO. RUNDLE, the best printer in the State, to print this journal. I have put on better paper, a full new dress of long primmer type in place of old small pica, giving fully thirty per cent. more reading matter each month; my pages are enlarged, and I propose to give my subscribers hereafter *the best medical journal in the world for ONE DOLLAR A YEAR.* Nothing tale—everything fresh; full medical news, and all new ideas of progress and advancement, will find place in my pages. A live and progressive monthly journal is what I claim and what I will have.

All communications must be addressed to

DEERING J. ROBERTS, M.D., Editor and Proprietor.

Nashville, Tenn.

METCALF'S COCA WINE

Always Uniform
Therefore
Always Reliable

. . . FOR FATIGUE OF MIND OR BO Y . . .

Made from Fresh Coca Leaves and the Purest Wine.

RECOMMENDED FOR NEURALGIA,
SLEEPLESSNESS, DESPONDENCY, ETC.

As a Tonic and Invigorator it is always safe, Agreeable and Certain, being prepared with the utmost skill and precision from the Freshest Coca Leaves and the Purest Wine obtainable.

RINGER recommends COCA LEAVES as of great value in Febrile Disorders, by restraining tissue metamorphosis, and for the same reason in Phthisis. For their decided anodyne and antispasmodic qualities, they have been successfully employed in Typhus, Scobutus, Gastralgia, Anæmia, Enteralgia, and to assist digestion.

COCA WINE is probably the most valuable Tonic in the Materia Medica *when properly prepared.* With stimulating and anodyne properties, combined, **Metcalf's Coca Wine** acts without debilitating, being *always uniform and therefore absolutely reliable.* For Athletes it is invaluable in imparting energy and resisting fatigue: Public Speakers and Singers find it indispenable as a "Voice Tonic," because, being a "tensor" of the vocal chords, greatly strengthens and increases the volume of the voice; and to the elderly it is a dependable aphrodisiac, superior to any other.

Physician's Sample Bottles, by express, carriage prepaid, upon the receipt of **One Dollar.**

* * *

DR. ARCHIBALD SMITH—"PERU AS IT IS"—states that "Coca" increases energy, removes drowsiness, enlivens the spirits, and enables the consumer to bear cold, wet, great bodily exertion and even want of food, to a surprising degree, with ease and impunity.

Theodore Metcalf Co.,

39 Tremont Street Boston, Mass.
Established 1837.

OUR READERS will please examine the wrapper of this journal and see the date to which their subscription is paid. *If time is out a remittance is in order.* If the date is incorrect a posta card or other notification will be appreciated. Please don't forget our terms—ONE DOLLAR A YEAR IN ADVANCE.

PEACOCK'S BROMIDES

(SYR: BROM: COMP: PEACOCK.)

Each fluid drachm represents 15 grains of the Combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithuim.

Uses: Epilepsy, Uterine Congestion, Headache, and all Congestive, Convulsive and Reflex Neuroses.

This preparation produces results which can not be obtained from the use of commercial Bromide substitutes.

DOSE.—One to two FLUID drachms, in WATER, three or more times a day.

CHIONIA FROM CHIONANTHUS

Uses: Biliousness, Jaundice, Dyspepsia, Constipation, and all Diseases Caused by Hepatic Torpor.

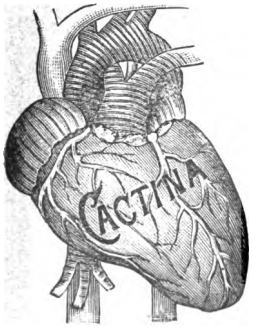
CHIONIA stimulates the Liver and restores it to a healthy condition, without debilitating the system by Catharsis; does not purge, per se, but under its use the Liver and Bowels gradually resume their normal functions

DOSE.—One Fluid Drachm three times a day.

SAMPLES SENT TO ANY PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

PEACOCK CHEMICAL CO., - ST. LOUIS.

CACTINA PILLETS



Indicated in abnormal heart action, mental depression, and general debility.

Cactina is the best cardiac and general tonic in the materia medica, and, therefore, indispensable in the treatment of every form of weakness.

☞Each Pillet represents one one-hundredth of a grain of Cactina—the active proximate principle of Cactus Mexicana.

DOSE.—One Pillet every hour, or less often, as indicated.

PRICE, PER BOTTLE (100 PILLETS), 25 CENTS.

Samples Mailed Free to any Physician Sending His Address.

SULTAN DRUG CO., St. Louis and London.

CHEKAN

IN THE TREATMENT OF

WINTER COUGH.

Dr. Murrell, of the Royal Hospital for Diseases of the Chest, London states as follows:

"Myrtus Chekan I have tested in fifteen cases of chronic bronchitis, all the patients with one exception being men. The age of the woman was 51; the ages of the men ranged from 36 to 58. They were all bad cases, most of them of many years' duration. Many of them had been attended at the hospital for some considerable time, and almost without exception they had in former years undergone much medical treatment with comparatively little benefit. Their occupations exposed them to cold, and wet, and draught, and in some instances they had the additional disadvantage of working in a dusty atmosphere. They complained chiefly of paroxysmal cough, with thick, yellow expectoration, and much shortness of breath on exertion. On physical examination of the chest, emphysema was detected, with or without a little rhoncus of the bases behind. *They were, in fact, ordinary cases of winter cough.* The fluid extract of Chekan was ordered in two-drachm doses in a little water every four hours, the dose being usually increased at the expiration of a week to half an ounce. The medicine was always taken without difficulty. In all cases the patient obtained some benefit, and in most instances the relief was very marked. There was in a few days a decided improvement in the cough, expectoration was from the first easier and soon diminished in quantity, and finally the dyspnœa was less."

Clinical reports from private and hospital practice promptly forwarded upon request, and samples to physicians who will defray expressage.

PARKE, DAVIS & CO.,

DETROIT, NEW YORK, KANSAS CITY, AND WALKERVILLE, ONT.